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ABSTRACT

Thirteen papers by graduate students who participated in a 1971 summer field program in Hidalgo, Mexico, are presented. Twelve of the papers are presented in the English language and one is presented in Spanish. Research for seven of the papers was undertaken in established Otomi Indian villages or hamlets. Research for the remaining six papers was undertaken in small towns inhabited by mestizos, Otomi Indians, and, in some cases, a foreign minority. A wide variety of research techniques was used, including sophisticated urban anthropological methods, ethnoscience techniques, linguistic and psycholinguistic techniques, observation, and interviews. Titles are "Use of Photographs with Q Methodology in the Mezquital Valley"; "Domesticated Animals and Village Nucleation"; "Culture Change and Intergroup Relations in a Small Mexican Town"; "Marketing by Female Vendors in Mexico"; "Self-Help and Directed Culture Change in an Otomi Village"; "Cultural Aspects of Diet in El Espiritu, Hidalgo"; "A Componential Analysis of the Otomi Animal Domain"; "The Political Organization of the Judicial District and the Municipal Government of Ixmiquilpan, Hidalgo"; "Education: Aspiration and Opportunity in a Mexican Town"; "A Case Study of a Catholic Youth Organization in a Provincial Mexican Town"; "The Making of an Anthropologist: Phase 1.5"; "Environment, Production, and Subsistence: Economic Patterns in a Rural Otomi Community"; and "The Pattern of Settlement in an Otomi Village: Structural Relations Among Outlying Neighborhoods." (DB)

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Ethnological Field Training In The Mezquital Valley, Mexico

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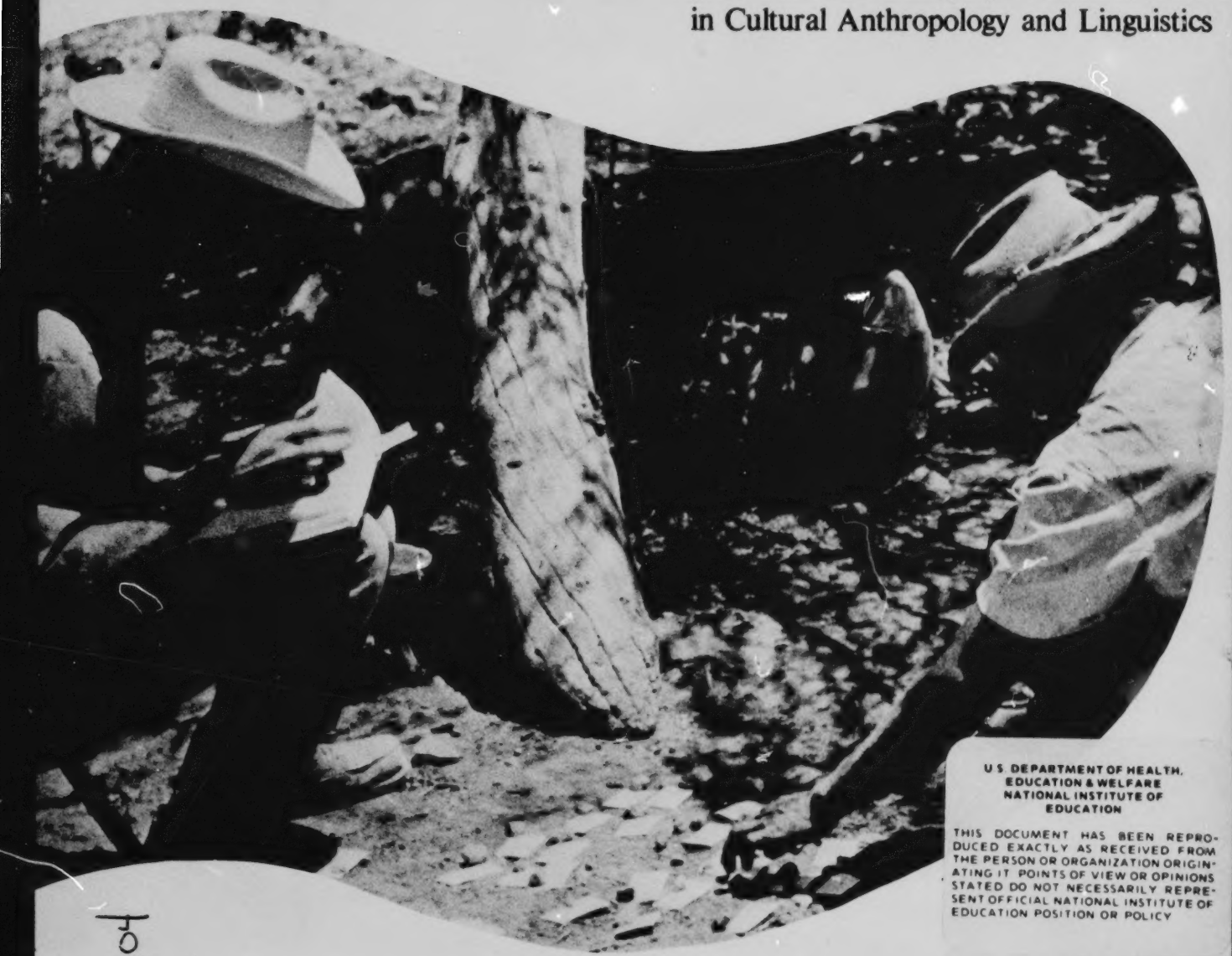

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Michael Kenny and H. Russell Bernard

ETHNOLOGICAL FIELD TRAINING IN THE MEZQUITAL VALLEY, MEXICO.

Papers from the Ixmiquilpan Field Schools
in Cultural Anthropology and Linguistics

edited by

MICHAEL KENNY and H. RUSSELL BERNARD

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The Catholic University of America
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TABLE OF CONTENTS

USE OF PHOTOGRAPHS WITH Q METHODOLOGY IN THE MEZQUITAL VALLEY
Barbara Curran.....1

DOMESTICATED ANIMALS AND VILLAGE NUCLEATION
Darna L. Dufour.....7

CULTURE CHANGE AND INTERGROUP RELATIONS IN A SMALL MEXICAN TOWN
Carolyn Kunin.....13

MARKETING BY FEMALE VENDORS IN MEXICO
Nijole Martinaitis-Armillas.....28

SELF-HELP AND DIRECTED CULTURE CHANGE IN AN OTOMI VILLAGE
William Millsap.....40

CULTURAL ASPECTS OF DIET IN EL ESPIRITU, HIDALGO
Marie Perucca and Joseph Bousquet.....51

A COMPONENTIAL ANALYSIS OF THE OTOMI ANIMAL DOMAIN
Ellen Rafferty.....63

THE POLITICAL ORGANIZATION OF THE JUDICIAL DISTRICT AND THE MUNICIPAL GOVERNMENT OF IXMIQUILPAN, HIDALGO
German Reyes.....81

EDUCATION: ASPIRATION AND OPPORTUNITY IN A MEXICAN TOWN
Carol Rice.....101

A CASE STUDY OF A CATHOLIC YOUTH ORGANIZATION IN A PROVINCIAL MEXICAN TOWN
Arlene Scanlon.....117

THE MAKING OF AN ANTHROPOLOGIST: PHASE 1½
Norman Tate.....129

ENVIRONMENT, PRODUCTION, AND SUBSISTENCE: ECONOMIC PATTERNS IN A RURAL OTOMI COMMUNITY
William T. Vickers.....143

EL PATRÓN DE ASENTAMIENTO DE UN PUEBLO OTOMI: RELACIONES ESTRUCTURALES ENTRE MENZANAS
Patricia Heuze.....163

PREFACE

This volume consists of a set (rather than a collection) of papers written by graduate students who were participants in summer field schools conducted in the Mezquital Valley, in the state of Hidalgo, Mexico. The 1971 field school (from which the majority of these contributions here are drawn) marked the sixth and last of its kind all of which were generously supported by the National Science Foundation. Professor Bernard pioneered the first in the Mezquital Valley in 1967. Professor Kenny joined him as co-director in the second (1968), the fourth (1970, held in the states of Washington and Idaho, USA; in the same year, Dr. Philip Young, University of Oregon, carried on the tradition in Mexico) and the fifth (1971). In one or another combination, Washington State University, the Catholic University of America, and the University of Oregon were all concerned, as an informal consortium, in the administration of these schools.

Previous publications relating to these field schools are Los Otomies (H. Russell Bernard (ed.) Washington State University, Laboratory of Anthropology no. 46., 1969) and The Inland Empire (H. Russell Bernard and Michael Kenny (eds.) Washington State University, Laboratory of Anthropology no. 48., 1971). A professional paper by Kenny, Bernard and Early, summarising and analysing our collective experiences in six years of field training will be published shortly. This volume, then is truly a sequel for, although each school comprised a different set of student participants, continuity was achieved by a staff which had worked together successfully to hammer out an organization common to all the schools.

Despite this common format, each school provided a new experience unique for the staff and the students. This unique quality of each field experience has at one and the same time a humbling and a maturing effect which, we believe, is an essential step in the making of an anthropologist. We noted this effect equally on the North American students at work in their own Inland Empire (Washington and Idaho) in 1970 as we did on the Mexican students at work in their own Mezquital Valley; for, from 1968 on, Mexican participation in our program had been a welcome innovation.

Our plan of operation was simple. Students were selected in the early Spring in the USA and Mexico and were sent an information manual to prepare them for the field. Once on site at headquarters (Ixmiquilpan, Hidalgo), we devoted the first week to acclimatising and orienting them. Seminars and workshops included brief overviews and practice in field techniques, as well as analysis of culture shock, all too necessarily telescoped into one week...but, we had depended, perhaps optimistically, on the students' own departments to prepare them for the field. Considerable thought and care was then given to 'marrying' the student with a neighboring community which fitted both his desires and capabilities. In the second week, the staff introduced the student to the local authorities, explained his mission, arranged suitable though usually modest accomodation, and visited him every week for six weeks. A short break at mid-term reunited students at headquarters for an exchange of experiences; the 'cross-fertilization' that ensued was both psychologically and culturally rewarding. The final (eighth) week again brought them together at headquarters for the handing-in of their six assignments and for a verbal but formal presentation of their field results. The papers in this volume represent their ultimate assignment prepared after they had been reaffiliated to their home institutions.

A preliminary content analysis of these papers reveals that seven were the fruit of work in established Otomi Indian villages or in Otomi hamlets which had begun the process of 'colonization', that is nucleation from a previously dispersed settlement pattern. We might add that in these communities bilingualism (Otomi and Spanish) is increasingly the norm but by no means universal, a factor which adds considerably to the difficulties of research. Six other papers were the result of work in small towns inhabited by mestizos, Otomi Indians and, in some cases, a foreign minority. Although students have not explicitly made the distinction here, some of the techniques employed in these town studies were expressive of the growing sophistication in urban anthropological method.

Since our contributors here were allowed -- indeed, positively encouraged -- to shape their own research focus, their papers are consequently individually distinct in the data they cover. Only one (Rafferty's) is concerned with linguistics, and it is a meticulously prepared example of the ethnoscience technique revealing the animal domains of the Otomi cognitive world. Other papers deal with municipal political organization, educational aspirations, diet, externally planned village nucleation and internal changes, different levels of acculturation, and a new youth organization in an important market town. Three papers describe economic patterns and are insightful of the role of market women, self-help, and subsistence living. As the paper by Vickers shows, even in a tiny Otomi hamlet the so-called local

subsistence economy may be directly linked to the national economy of Mexico; low rainfall and scarcity of arable land do not make possible a self-sufficiency.

Another paper, in Spanish, by one of the Mexican students (Patricia Heuze), shows how even a few weeks of field work can uncover a fascinating kula-like exchange of ritual between neighborhoods in a small Otomi village which overlays (and gives structural significance to) marriage alliances. Finally, two more papers (Curran, and Tate) deal specifically with methodology (e.g., the application of an adapted Q sort) and the problems, often bizarre and frustrating, that one can encounter in a first experience in the field.

We single out these last two, not because they are better than the other papers, but because they point up a dilemma still unresolved in field school training. The dilemma, simply put, lies in how to resolve the desire both for valid data collection and for practice in field techniques. We believe that the essence of field training may be reduced to the process of sharpening oneself as an instrument of research. Yet, in one student's words: "...the techniques seem to get in the way of collecting data..." There is an understandable though perhaps naive irritation with 'assignments', particularly when one is not confident or unskilled in their use, because they seem to prejudice the very quality of the field experience. We recognize, with pride, the general dedication and professional commitment of all the students; yet, the echo of their irritation remains..." ... if only we could have the field experience without the field work..." We therefore still maintain that there is a significant qualitative difference between a fully-fledged professional in a data-gathering research situation, and a well-meaning, however intelligent, student apprentice in a field training situation. And our view in no way demeans the quite valuable contribution that students have demonstrated in this volume.

Whatever the theme of these papers, the authors speak for themselves. Our editing has been confined to a decorous minimum. We are content to believe that their efforts here represent one important step further in what is, for most, a lifetime commitment to anthropology.

We acknowledge with deep gratitude the kindly wisdom of Dr. Alice P. Withrow of the National Science Foundation whose vision helped to make the schools and this publication possible under grant number GZ 1030. We thank, too, our colleagues in the Instituto Nacional de Historia e Anthropologia (especially Professor Fernando Camera) and in the Universidad Iberoamericana (especially Professor Angel Palerm) in Mexico City who sent us such enthusiastic students.

Even more, over and above the personal expressions of gratitude and other more material forms of reciprocity for which students were individually responsible to their informants and communities, we wish to record our own debt -- that of all the Field Schools, staff and students alike -- to all the local authorities and peoples in the Mezquital Valley who, graciously and often with great patience and hospitality, gave of their time to further our purpose. Although there is no adequate way of repaying them, if these papers reflect the truth of their human condition then at least we have been faithful to their trust.

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USE OF PHOTOGRAPHS WITH Q-METHODOLOGY IN THE MEZQUITAL VALLEY

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Aqui se describe un método para emplear "Q Sort" en personas analfabetas. En vez de emplear el método corriente de poner tarjetas en orden, se ha usado el método de calificar retratos fotográficos. En un pueblito Otomi en Hidalgo, Mexico, 13 informantes escogieron y calificaron sesenta fotografías de miembros de la comunidad. Cada informante tenia que escoger las fotografías en 9 grupos alternados, contestando a tres preguntas consecutivas. La hipótesis era que si las preguntas # 2 y # 3 tuvieran significado para los miembros de la comunidad, habria una correlación positiva o negativa con la pregunta # 1. El análisis de la información recogida, usando "cluster analysis" no rindió ninguna configuración útil, con la conclusion de que los valores escogidos no tenian significado para los miembros de la comunidad, o que la muestra escogida era demasiada limitada. Esta técnica se ofrece solamente a los que quieran aplicarla para el estudio de actitudes entre grupos analfabetos.

Following a short period of classroom briefing on the community and its peoples, students were sent out individually into surrounding communities to gather ethnographic data and to accomplish specific weekly assignments, each designed to train the student in routine ethnographic tasks. My own training in visual anthropology under the guidance of John Collier, Jr., provided me with a useful tool in general data-gathering which culminated, almost unexpectedly, in a methodological technique which is the focus of this paper.

By the use of photographs of sixty male community members, an adaptation of Q Methodology (Q sort) originally developed by Stephenson (1953) was devised in an attempt to question primarily non-literate respondents about values they held with regard to attributes of other community members. Using Q sort forced-choice techniques amenable to statistical analysis, fourteen informants sorted the sixty photographs to answer questions about fellow residents. The primary purpose of this paper is to describe a methodological tool for others who may find the technique applicable to their own research situation with non-literate people.

The Setting

Portezuelo (Hidalgo) is a non-nucleated settlement of 170 dwellings in the Mezquital Valley. Over 99% of its 958 inhabitants are Otomi Indians. Literacy, in Otomi or Spanish, was calculated in the census of 1959 at approximately 31%, a figure which I estimate, based on my own observations, to be high for the present time. The community is primarily agricultural. Corn and beans are eked from the stony dry soil. The maguey plant is probably the single most important resource for the Otomi. Its leaves yield thatching for roofs, fibre from which ixtle is spun and utensils made for food preparation, while the sap provides a potable "milk" (agua miel) and a fermented beverage (pulque) consumed daily by every

adult and child in the pueblo.

The village is bisected by a paved highway over which buses pass each hour to nearby market towns: Ixmiquilpan (9 km.) and Alfajayucan (12 km.). There are no motor vehicles in the pueblo and bicycles are the popular mode of transportation, particularly for the younger men, to the fields and ejidos. In the center of the settlement, next to the road are several community structures. The tienda (store) serves as a focus for women on their way to market or to wash clothing in the nearby lavadera. Throughout the day there is also constant traffic to the store as the women bring in their freshly collected agua miel to exchange from the jars at the tienda for fermented pulque. The fresh sap is mixed together with pulque, purchased in 25 or 50 litre quantities from a merchant. An amount equal to that of the fresh agua miel is withdrawn without charge. Truckers occasionally stop for beer as do men on their way to and from the fields for pulque and fresh rolls. The steps of the tienda serve usually as the meeting place for the Sunday junta when affairs of the community are discussed by the men of the village.

The church, rebuilt in 1710, is a yellow stuccoed Romanesque building surrounded by a high white wall. Dedicated to the Santo de los Niños it is little used by the people of Portezuelo except during fiesta time in December, but many visitors from surrounding communities come to make or fulfill promesas (vows) to the saint. Their arrival is invariably announced by the pealing of bells from the church tower ringing over the settlement. Pigs and chickens roam the churchyard among the graves. Many of the grave stones were donated by visitors to the church and these are cared for by the mayordomos, twelve in number. The church was the only building in Portezuelo boasting electricity (2 bulbs) until late during the summer of 1971, when electricity was installed in El Centro de Salud, the dispensary which opened in the early 1960's.

The dispensary now has a full-time nurse who is prepared to give first aid and carry out a vaccination program which, she feels, is less than effective, for it lacks popular interest. She also administers the federally subsidized food commodities program, dispensing dried milk, dried fish and cooking oil to families with young children. Only people living in surrounding manzanas (districts) participate to any extent in this program. A medical intern had been assigned to the village until this summer when it was decided that the needs of the community were not great enough for a full-time doctor. Infant mortality (under age 5) is estimated at between 30-40% by the intern. The principal causes of death in descending order are: upper respiratory disease, gastroenteritis and tuberculosis. An attempt is made to maintain minimal cases of T.B. at home with the use of drugs and isolation of dishes, sleeping quarters etc., but the nurse reports this program is rarely effective and the disease is commonly spread among all family members.

In startling contrast to the shabby buildings of the plaza, the school, completed by the federal government in 1969, is an example of entirely modern architecture, complete with landscaping and plantings. Housing three primary grades, it is staffed with three schoolmistresses who commute daily from the municipio, Tasquillo about 12 km. distant. Although the census lists approximately eighty children, fewer than half can be counted on attending on any given day; the others

are occupied with family tasks. I was unable to obtain figures on the matter, but the schoolteachers told me that very few children completed the three-year course and that none had gone on to the secondary school in Ixmiquilpan. A modern basketball court, built in 1967, had never been used; there were no funds to supply the balls.

As many as fifty men commuted weekly to Huichapan where they worked in the hydraulic plant, but most males stay in the community working their fields. Men, women and children work as pastoralists, herding sheep and goats about the countryside. Women spin ixtle and weave ayates or square sacks (for carrying burdens) which they sell at the market. There are no other fulltime specialty tasks in the village. Wool from the sheep is taken to weavers in nearby towns. Otomi embroidering is little practiced. A few men are part-time musicians, playing for the fiesta and celebrations on their violins and guitars.

The Western world would appear to have had little impact on the residents of Portezuelo. A few men have worked in Mexico City but seem to return to marry and settle within the community. None have travelled to the United States for work. In the two cases where non-Otomi women were married, they settled within the community to raise their families. There are several cases of polygyny, one in which a man has married two sisters. One of the mayordomos explained that most (ca. 80%) marital bonds are of the common law type, the rest are civil marriages. Church marriages are prohibitively expensive. The routines of life, growth and death seem to continue in much the same way as they have for centuries among the Otomi.

Method

Throughout the course of the summer's work, photographs had been both randomly and selectively taken of every-day events. Still photographs had been successfully used in the preliminary identification of residents, in writing up a cultural inventory, in describing cultural processes and for recording several ceremonial processions and events which occurred during the summer. When unanticipated circumstances forced the abandonment of another research focus, an article by Kerlinger (1964:581-596) on Q methodology as developed by Stephenson (1953) prompted a new idea. Since most of the community was non-literate, a questioning procedure based on the sorting of cards, each bearing the name of an abstract quality, as is customary with Q methodology, was not possible. If, however, such a series of questions based on photographs could be structured, Q methodology might become feasible.

Accordingly, I busied myself at a two-fold task. The first was the enlargement of photographs to approximately 2 x 2 inch format, each picture containing one face. The second task was that of structuring a questionnaire designed to elicit information about individual values with regard to other community members. Ultimately, the following three questions were used in the sort:

1. Whom would you most like to be? Whom would you least like to be? (If it were possible to exchange places with these men.)

2. Which men participate most in community activities, which the least? (e.g. faenas, comités, meetings, assemblies)
3. Which men are the most progressive; which the most conservative?

I then hypothesized that if the values implicit in question 2 (community participation) or question 3 (progressive-conservative) were held either positively or negatively within the general community, then those attributes would be reflected in the choices made in question 1 (self-identification). If one, but not both of the values were considered important, then this too would be reflected in correlations between question 1 and either 2 or 3. The validity of a null hypothesis (i.e. there are no correlations) is also entertained.

Sixty-one photographs of community men, obtained under fairly random circumstances (photographed in homes, fields, at community meetings) were numbered and identified. Sixty of these were used for each sort. If the informant being interviewed was among the photographs, his picture was removed. If not, number 61 was consistently removed. Each informant was asked to sort the pictures three times (total of 180 scored), once for each question. In this forced-choice test, nine piles were arranged along a bell-shaped continuum, beginning from the positive end, the piles being stacked as follows: Plus 2 3 6 11 16 (neutral) 11 6 3 2 Minus. In order to remind respondents of the number of pictures desired in each pile, a method for counting them had to be devised, since written numbers would not be appropriate for non-literates. The expediency of using toothpicks, arranging them in piles of the desired number and order proved successful.

Several sorts of problems cropped up immediately. I had initially decided to use photographs of adult males only. During a pre-test I was informed that there were many jovenes (youths), not adultos (adults) in the sample. I had made the erroneous assumption that working males in their twenties would be thought of as adults. I was informed that men were considered joven into their late twenties until they had taken a wife which meant that an unmarried male of 28 would still be "joven" while another who had married at 17 would be accepted as "adulto". An attempt was made to restrict the photos accordingly, but limits of time caused a few of the jovenes to be included in the selection.

Another problem, a rather critical one because of the few days remaining in which to complete the study, occurred when one of the sample photographs was taken by a young man visiting my office. Unable to continue without the full sample, a valuable day was lost in replacing the picture with a duplicate since another could not be substituted that far along in the interviews.

Generally speaking, the sorts went along very well. Respondents tended to sort from plus to minus, then filled in the piles closer and closer to the center, or neutral, pile. One man preferred a binary approach to his sorting (all equally plus or minus). This lead to my unsuccessfully trying to think of ways to sketch the idea of a continuum with pencil and paper. In a single case, a mayordomo in his 50's despite elaborate instruction both in Spanish and later in Otomi by a young man who had already performed the test, the subject seemed unable to grasp the idea of the sort. After nearly two hours he succeeded in sorting sixty cards for a single question, so further testing was abandoned. The complete sort gen-

erally took about 45 minutes to complete. In all, 15 sorts were performed, 11 of these were complete, two were partial, and two others were felt to be sufficiently incomplete for analysis. Therefore a total of 11 complete sorts and 2 lacking question 3 were used. All sorters were male, I should very much liked to have had female sorters; one pre-test done with a female respondent showed her to be very quick at grasping both the general idea and the sorting technique, but time did not permit a much desired larger sample. After the first two sorts, questions 2 and 3 were asked first and number 1 was reserved for last which seemed to make the sorting go more smoothly.

Data

The data obtained were keypunched for analysis in the CDC 6400 computer at the University of Arizona. Means were compared within individual responses as well as between all subjects for all questions. I used the Pearson Product-Moment Correlation Coefficient in order to determine uniformity of response both for each respondent and between respondents. Subject answers were further run through the BCTRY cluster analysis system to see if they could be classified into groups based on their responses to pictures.

In both cases, no useful groupings were found. The single consistency was that in mean ranks for question 1 (self-identification). Certain figures, such as the village head (<u>representante</u>) and one other resident, a well-to-do man were rather consistently rated highly, while two other individuals elicited consistently negative ratings. While the absence of strong correlations in the questions suggests indeed that the value statements (questions 2 and 3) were not significant to the individuals tested, one must bear in mind the small number of respondents and the possibility, which I consider remote, that my directions were not understood.

Conclusions

While this experiment in Q Methodology has been far from spectacular in the statistical analysis, I feel that the technique, perhaps modified into a simple rank ordering, has potential for the study of attitudes in societies where literacy is not present. A longer stay within the community may have suggested more fruitful questions about community values and attitudes, while a larger informant sample should produce a greater base for positive correlation. This method may be applied in attempting to elicit materials concerning political or social factionalism within a community. While the sort as structured does not lend itself to a direct and explicit "real vs. ideal" instrument such as that developed by Rogers and Dymond (1954), Kase and Hirabayashi (1963) or Kemnitzer (1971), it should lend itself to implicit level sorts of these values as perceived by individuals of others in his own community. Photographs carry a more explicit set of qualities than do the more conventional Q-sort listings of abstract qualities. Collier (1967:62) suggests that "photographs can trigger emotional revelations otherwise withheld, can release psychological explosions and powerful statements of values," an observation which, I submit, is at the heart of this technique.

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7

DOMESTICATED ANIMALS AND VILLAGE NUCLEATION

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Las comunidades tradicionales de los otomíes consisten en núcleos centrales que sirven de centros cívicos y ceremoniales, con las casas familiares dispersadas alrededor. En cambio, agencias del gobierno nacional han dado impulso al plan de agrupar más las casas en los centros. Este plan de colonización no ha tenido buen éxito.

Mi tesis tomará el caso de tal pueblo agrupado, y propondrá que hay factores económicos, especialmente en cuanto a los animales domésticos, que significan la importancia del patrón de asentamiento disperso para la mayoría de la población. La agricultura no tiene mucha importancia en la vida económica del pueblo y casi todos los hombres buscan trabajo de obra asalariada fuera del pueblo. Pero los sueldos que ganan son tan mínimos que hay que complementarlos con otras actividades económicas. En este respeto, los animales domésticos extienden la explotación de sus terrenos y aumentan sus presupuestos familiares. Las familias que viven en la colonia agrupada mantienen menos animales que el promedio del resto del pueblo y la mayoría guardan los animales en sus casas viejas fuera de la colonia. En fin parece que el número de animales domésticos de que depende la familia sería una consideración en la localización de las viviendas.

The present essay is concerned with exploring the importance of domesticated animals in village nucleation. The data were gathered in the Mezquital Valley of Mexico's central plateau in the summer of 1970. The case to be considered is an Otomi village that has a nucleated center and dispersed outlying manzanas. Nucleation has occurred in the village in the past fifteen years, the more traditional pattern being that of dispersion. Nucleation occurred as the result of pressure from the superordinate society and carried with it notions of increased acculturation. The pattern of dispersion is being maintained none the less. I hope to show that an important factor maintaining dispersion is the economic importance of domesticated animals in the village economy.

Panales is a village of slightly over two hundred households in the Mezquital Valley. The Mezquital is semi-arid desert, receiving less than 300 mm of rainfall annually. According to informants, a considerably smaller amount actually falls on Panales itself due to its unfavorable geographic position within the valley. Approximately 1% of the village's total land area has the benefit of irrigation. Because of the aridity of the area, the rest of the land is unsuitable for the production of the primary food crops, corn and beans. Some of the land is, however, under cultivation of maguey and nopal cactus from which the villagers derive food stuffs as well as a fiber for weaving. Exploitation of the land is extended further by the keeping of domesticated animals, principally goats, pigs, cattle and horses.

Agruculture and animal husbandry alone are insufficient to maintain the expected standard of living. Wage labor is an important source of cash income in all households. The major portion of the adult male population seeks employment as day laborers, masons and agricultural peons in the nearby municipality. Such employ-

ment is on a daily wage basis and often not permanent. Masons receive about double the daily wage of day laborers and peons, but the most important consideration at this level is the actual number of days of employment per month. Considerably higher on the economic scale are salaried employees and teachers. These, however, account for only a small proportion of the total population.

In some cases women contribute to the cash income through the sale of ayates (carrying cloths woven from the fiber of the maguey plant). The fiber can be prepared locally, but is generally bought in the market. The fiber is bought one week, spun and woven, and the ayate is ready for sale on the next market day. The business of weaving is women's work. All women know how to spin and weave, but only the poorer households rely on it as a cash raising activity. Even in instances where ayates are needed for personal use, only the poorer women will do the weaving themselves, others will spin the fiber but commission a friend to do the weaving.

The residential unit is a manzana. In Panales, manzana is a sub-community composed of groupings of patrilineal kinsmen. The territory of the manzana is that land owned by members of the kin groups, the segments of which tend to be contiguous, but need not be. The village is divided into 6 manzanas and a Colonia. The Colonia is a manzana, but differs from the other manzanas in being the only nucleated area, and essentially the focal point of the village. Membership recruitment is through birth in the patrilineage associated with the manzana. In the Colonia, recruitment is extended to include residence in the specific geographical area as well.

Land is held individually as private property, or communally as the joint estate of all members of the village. Communal land can be held by individual villagers by right of usufruct. Usufruct rights are subject to the rules of inheritance as is private property. Collective land is communal land not exploited by individual right of usufruct. The only land in the village which falls into this category is a plot in the Colonia divided potentially for house lots, but currently being cultivated by communal labor.

In terms of usuage all land falls into one of four categories: vivienda, temporal, riego or monte. Vivienda is house lots, the size varying greatly but generally including a garden plot as well as the house site. Temporal is unirrigated land that has been cleared for planting, though not necessarily in current use. Riego is irrigated land of which there is only a small number of acres; a portion of this is communal land. Monte is uncleared land.

The village as a whole is nearly endogamous. Men tend to live patrilocally. Married women always live virilocally (Fischer 1958:513). The inheritance of property is bilateral, but with preference given to males in inheriting vivienda and temporal land. The youngest male has inheritance rights to the house site and the dwelling. The actual fractioning of the estate does not often take place until a number of years after the death of the benefactor, though portions of the land are occupied and in use long before.

The Colonia is a nucleated area. Originally the area that is now the Colonia consisted solely of the church, the schoolhouse, and tracts of uncultivated land. In the early 1950's the process of colonization was begun with the impetus from two developmental agencies of the national government, Misiones Culturales and

Patrimonio Indigena del Valle del Mezquital. The communal land in the area was divided into house lots and private land owners were encouraged to do likewise. The government agencies were instrumental in house construction, as they provided a portion of the building materials, technical assistance and some of the labor. During this period about 30 houses were constructed, not all of which are currently occupied.

Certain differences between the manzanas and the Colonia are easily observable. First, in the Colonia the houses are closer together and the yard areas tend to be enclosed with stone walls. Houses in the manzanas, on the other hand, are dispersed and the house lots and garden plots are much larger than those of the Colonia. Living areas are enclosed or partially enclosed with low bush or cactus fences.

Second, the houses in the Colonia fall into two classes; those built with the help of the government agencies and those built privately at the expense of the owner. The former are all block[1] construction with tile roofs and cement floors. The basic plan is a three room L - shaped house with a kitchen of less sturdy construction added on behind. Those built privately have from one to five rooms, are of cantera block construction, tend to have cement floors and have roofs of either tile or laminated cardboard.

The predominant house type in the manzanas is one in which the functional areas are assigned to separate buildings, the minimal unit consisting of a building for sleeping and one for cooking. The more traditional construction is stone or organ cactus walls with roofs of the leaves of maguey or yucca cactus. Cantera block or stone construction with a type of laminated roof is becoming increasingly important as electrification reaches further and further out into the manzanas.

The most highly valued houses in all parts of the village are those of stone or cantera block with tile roofs and cement floors. These are the predominant house type in the Colonia.

Third, the relative level of wealth is higher in the Colonia. Villagers with the highest cash incomes, such as teachers and salaried employees, tend to live in the Colonia. A much higher percentage of households there have electricity. Very few of their women weave ayates. Most of the more valuable domesticated animals, such as horses, cattle and oxen, are owned by Colonia residents. Fourth, the more prestigous members of the village live in the Colonia. This includes not only teachers but also the incumbents of the important secular and sacred offices.

The Colonia accounts for 18% of the total number of households in the village. The church, the school, the village stores, two out of the three village water taps and the public laundry area are in the Colonia and contribute to its being the focal point of the entire village. In addition, the Colonia has full electrification and actual streets. Such innovations carry a certain prestige value in Otomi society.

The Colonia represents the option of living in a nucleated area. This is assumed to be an actual option as (1) there are available house lots on communal land, (2) there is privately owned land in the general area not being put to productive use, (3) numerous houses are vacant due to the fact that their owners are

still living in the manzanas or have migrated outside the village.

Though the option exists, the pattern of dispersion is still being maintained and proportionally more house sites are being chosen in the manzanas than in the Colonia. In the past four years 35 houses have been constructed, the majority of which were built on inherited land in the manzanas. Of the seven house sites that were purchased over the same period of time, only one was in the nucleated area.

I suggest that a factor acting to maintain dispersion is the importance of keeping domesticated animals. As will be shown, the problems of animal maintenance in the Colonia are intensified so that choice of residence there is incompatible with the dependence on animals as a major source of cash income.

The villagers keep a number of domesticated animals including goats, sheep, pigs, chickens, horses, oxen and cattle. Sheep are far less numerous than goats and for the purposes of this discussion, the word goat will be understood to refer to both sheep and goats. This is in accordance with the Otomi use of the word "chivos" in general conversation to refer to both animals.

Approximately 65% of all households have at least one goat. The size of individual herds ranges up to fifty animals; however, the average herds are considerably smaller. Goat milk is not exploited as a food. Barbecued goat meat is one of the traditional dishes served on festive occasions, but otherwise does not contribute directly to general household consumption. Beyond this, goats serve two purposes; they are sold in the market in the event of extraordinary expenses incurred by the household and they are used to cover the cost of occasional obligatory community contributions.

Pigs do not play a direct role in daily household consumption. They are kept primarily for sale in the market. Although pork is more commonly eaten than beef, chicken or goat (because it is less expensive), households sell their animals rather than slaughter them. This is probably related to the problems of storing such large quantities of meat coupled with the fact that daily meat consumption is minimal.

Chickens are numerous in all parts of the village. They are important for the production of eggs. As a source of meat they are used almost solely in conjunction with festive occasions. The actual chicken population is quite variable as all of one's chickens can easily be consumed at once to celebrate a wedding, baptism, religious feast day, etc.

Horses, cattle and oxen are kept by only 8% of the households. They are considerably more valuable in the market than the smaller animals, and therefore ownership tends to be concentrated in the households on the upper end of the village socio-economic scale. Oxen are valuable as plow animals. Horses are sometimes used for transportation and as draft animals, but they, like cattle, are raised primarily for sale in the market.

Thus, with the possible exception of chickens, the domesticated animals kept by the villagers do not contribute directly to the daily household consumption. As they are maintained primarily for sale in the market, it appears that they are a kind of savings mechanism, a way of investing liquid capital. By converting animals to cash, the villagers are able to purchase those things which they can

only obtain from the market. The sale of animals is not predictable in terms of the fluctuations in market prices, nor in terms solely of the maturity of the animals. The determining factor is a financial state where other sources of cash income are insufficient to meet the necessary expenditures.

By considering cash income as a variable we can predict that villagers with the most stable cash incomes will tend to rely the least on domesticated animals and therefore keep fewer of them. This is empirically the case. Those villagers with the highest cash incomes, such as salaried employees and teachers, tend to have the fewest animals.

The motivation to maintain large numbers of animals is greatest in the poorer households where the need for a continuous cash income is pressing and alternative sources are unstable or inadequate. The traditional patterns of animal maintenance are adapted to a dispersed settlement pattern. Residence in a nucleated area such as the Colonia, demands changes in these patterns. Such changes tend to minimize the economic importance of the animals to the household.

Horses, cattle and oxen are loose for long periods of time in the surrounding hills and are corralled only when necessary. As they are not kept within the living areas their effect on settlement patterns is negligible and these are not of immediate concern here.

Goats are herded and pastured. Pasturing of the larger herds is done on the uncultivable hills to the south of the village. This pasturage is adequate, except in times of drought when other feed must be provided to prevent large losses through starvation. Sheepherding is done by women, children and several men in the village. Shepherds recruited outside of the nuclear family are paid a set rate of half a peso per goat per month as well as a daily ration of food.

The general pattern is that the animals are taken to the pasture in the middle of the morning by the shepherd and returned at nightfall. The animals are then confined to corrals in the yards of their owners. Exceptions to this pattern occur in the Colonia where some of the households corral their animals on their previous house sites in the manzanas and never bring them into the nucleated area. In a few cases, the goats are kept with the herds of kinsmen living in the manzanas.

Pigs present different problems. Pigs are not herded and they cannot find sufficient nourishment if merely allowed to wander about freely, they must be given a daily ration of corn. The practice of allowing pigs to scavange reduces the amount of corn they must be fed and therefore the cost of maintenance. This practice, however, increases neighborhood tensions in the more densely populated areas as pigs tend to wander into the wrong yards and are often expelled with stones. To avoid such problems in the Colonia, where population is densest, the pigs must be adequately enclosed, watched or given to the care of friends or kinsmen in a 'partner-ownership'. A partner-ownership is an arrangement whereby one person invests the initial capital and the other the cost and labor of maintenance. If the animal is bred, the offspring are divided equally and if the animal is sold, the profits are shared. Another solution to the problem of neighborhood tensions in the Colonia is to keep the pigs permanently at abandoned house sites in the manzanas.

Chickens are not as problematic as pigs. They are content to explore and exploit a much smaller territory and are easily confined to yards. They do not, therefore, tend to be a cause of tension in the Colonia as are pigs. As is the case with goats and pigs, some households in the Colonia keep their chickens at house sites in the manzanas.

The corralling or enclosing of animals at abandoned house sites deviates from the more traditional pattern. In all areas of the village, but the Colonia, goats are enclosed in corrals that are within the yard area of the house and therefore, within the sight and hearing of their owners. Pigs and chickens are likewise enclosed within the yard. Enclosing animals at abandoned house sites, as is done by some Colonia residents, removes them spatially from the protection of their owners and thus exposes them to greater environmental hazards, including predators and thieves. The loss of an animal, for example the loss of a chicken to coyotes, can cause the household to return to the dispersed area in defense of their animals.

Residents in the Colonia therefore often have to devise alternative solutions to the problems of maintaining animals if they choose to reside in the Colonia and continue to keep animals. These alternatives are: (1) keep the animals at abandoned house sites and suffer their possible loss to environmental hazards, (2) enter into a partner-ownership of some or all of the animals thereby reducing the profit value of the animals to one half, or (3) sell, or otherwise dispose of, some or all of the animals. All of these alternatives serve to reduce the number of animals kept. Thus, there are considerably fewer animals per household in the Colonia than in the manzanas. The number of pigs and goats per household in the Colonia is 6.1,[2] while the number per household in the manzanas varies from 8.0 to 11.8, with an overall average for the six manzanas of 8.8. Excluding those animals whose owners reside in the Colonia, but are kept in the mazanas, the number of goats and pigs per household in the Colonia is reduced to 4.1.

The traditional pattern of economic dependence on domesticated animals is incompatible with residence in a nucleated area. Until alternative sources of income are sufficient to meet expenditures over long periods of time, the keeping of animals will be a factor in the choice of residence and will tend to maintain a dispersed settlement pattern.

Notes

1. The blocks most commonly used in construction are made of <u>cantera</u>, a type of loosely compacted stone that is quarried in the valley.

2. These figures serve only to approximate the real distribution as they reflect, in most instances, deliberate underestimation and concealment of assets.

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CULTURE CHANGE AND INTERGROUP RELATIONS IN A SMALL MEXICAN TOWN

CAROLYN KUNIN

En una pequeña comunidad rural de 2,235 habitantes, compuesta de mestizos de habla española y de indios otomies, en el Valle del Mezquital, Hidalgo, se llevó a cabo un estudio para determinar los distintos niveles de aculturación.

Se analizaron las genealogias de dos familias numerosas, pero no relacionadas entre si. Se plantea la hipótesis de que la mejicanización de ésta comunidad resulta de un cambio de cultura espontáneo y a la vez planeado y no de una numerosa inmigración de mestizos en busca de ganancias económicas.

Se descubrió que los mestizos se encuentran en varios niveles de acculturación y unidos a los Otomies por lazos familiares.

Villa[1] is a rural Mexican community in the arid zone of the Mezquital Valley, in the state of Hidalgo. It does not appear to be necessary, in Villa, to shed totally one's Otomi background when becoming part of the mestizo middle class. The inhabitants of the center of town tacitly seem to accept this heritage; one of the Villeños commented, "We are all descended from the Otomies ... though most of us no longer speak the language." The current population of the town is 2,235 people, most of whom appear to be of local origin. The Mexicanization of Villa probably occurred within the local population as a result of processes of spontaneous acculturation and programs of culture change, and not because of a large influx of mestizos seeking economic gain. If this conclusion is valid, the mestizo inhabitants of Villa will be seen to be at varying levels of acculturation, and will have kinship ties to the relatively traditional population of the surrounding area, which would foster cooperative relations between the groups and acceptance of the Otomi background on the part of the mestizoized population.

Introduction

In order to research this hypothesis,[2] I collected the genealogical histories of two unrelated women, both of whom live near the plaza in Villa. They are part of extended families, the members of which live in varying cultural settings. Within both families are metropolites who live in urban centers, townspeople who live in Villa, and villagers who live in the surrounding hamlets and isolated homesteads. Those who live in the outlying areas speak Otomi, as well as Spanish, and wear traditional clothing. Interviews were held with as many of the family members as was possible, within the time limitations of the two-month field season.

A brief description of life in Villa is included to provide a framework within which the cultural range represented by these two families can be better understood. The channels of cultural communication and the concomitant culture change will be explored through the analysis of the relationships obtaining between (1) Villa and a satellite hamlet, and (2) between Villa and the national structure.

The Setting

The Villeños call their mountain-ringed valley an oasis. Villa, indeed, presents a lush green focus within the panorama of a rock-filled cactus desert, for it is the result of irrigation systems which provide water for previously parched land. There are two sets of irrigation canals: the old system (attributed by legend to the Colonial period) and the modern complex of concrete canals which was completed and put into use last year but is now being extended to more and more communities in the area. The modern construction program is under the auspices of the Patrimonio Indigena del Valle del Mesquital in cooperation with the Secretaria de Recursos Hidraulicas (PIVM, 1965-1968), both of which are federal agencies. The Tula River, which flows through the valley, is dammed to provide water for the older irrigation system. The river, however, is extremely polluted. Townspeople call its water "agua sucio," and although it is at the edge of the community, it plays no additional role in the life of the people.

Villa, the cabecera (administrative center) of the municipio, a geo-political governmental unit comprising 167 square km., is divided into four barrios (geographical divisions) of differing appearance. The paved road which passes through the two southern barrios connects Villa to one of the major Mexican north-south arteries, the Mexico-Laredo Highway. Most of the town's commerce takes place on the plaza or along this road, including that of small general stores, bicycle sales and repair shops, corn mills, the hotel and two restaurants. Community facilities, the government offices, the schools, clinic, post office, the offices of the irrigation department, the telephone office, and the church, as well as the homes of many of Villa's prominent citizens are in these locations. Although there are milpas (farmed fields--primarily corn) in the two southern barrios which benefitted this year because of the new irrigation system, these barrios appear to be drier than the two northern ones which extend from the plaza to the river. Milpas dominate the landscape in the northern barrios where there are fewer houses which generally are set back into the land. The only paved road through the northeastern barrio leads from the plaza to an elegant bathing resort which is frequented by urban Mexicans. Three modern-style weekend residences, owned by city families, are located along this road. Leading east from the plaza is a narrow, unpaved street, always crowded with traditionally dressed people, where women set up braziers to cook and sell small quantities of food and drink. Villa's main streets radiate out of the plaza in a rectangular pattern. Although most of the large houses seem to be concentrated on the plaza and along the paved roads, there are some large well-built houses throughout the cabecera. Running water is available in the cabacera, the center of which has had electricity for more than fifteen years; however, parts of the northeastern barrio were not connected to the electrical system until August, 1970.

Although the available productive land is not sufficient for the population of the municipio, most of the men work the land to some extent. In some families, the land forms the total economic base whereas in others, the men work as tradesmen, teachers or construction workers, and the land provides only a portion of the economic foundation. Men work the land as either owners, sharecroppers or day

laborers. Generally, the landholding men own small parcels, although small numbers of landowners do own extensive acreage. Few men live on or near the lands which they work so most must daily walk the long distances to their fields. Corn, beans, alfalfa are grown and kept for family consumption, but surplus chile peppers and tomatoes are sold in the local Sunday market and the Monday Ixmiquilpan market. Some families own fruit trees--lemon, avacado, nut, fig and pomegranate-the produce of which is sold to truckers who purchase and crate it in the plazas of the larger villages of the municipio. The crated fruit is transported to the Merced Market in Mexico City. Nuts are a major source of income for the residents of Villa, during the autumn months. Animals, e.g., cows, pigs, chickens, burros, sheep and goats, are owned by many residents. Families living in the center of town also own animals, but keep them with relatives who live on the fringes of the cabecera. Some families own a small piece of land outside of the town at which the animals are housed.

Construction work is a major occupation in Villa. Jobs have been provided by the irrigation project, the renovation of the health clinic, a kindergarten complex (recently completed), and private homes which are enlarged, renovated, or built on order. A new Federal secondary school, which will soon be under construction, will also provide work. Many construction workers find employment in other parts of Mexico, but return to visit with their families regularly.

The statement, "There are many professionals in Villa," is frequently repeated by the locals and is based on the number of teachers who reside there. Villeños estimate that approximately 400 teachers live in or come from the municipio. Many who live there teach in other communities. Other residents work in nearby cities as social workers, government employees, bus and truck drivers, and mechanics.

Although everyone in the cabecera speaks Spanish, many also speak Otomi and still more are familiar with it. At a luncheon, attended by the town's political, economic and educational leaders, and by me, all of the locally born men responded to a joke told in Otomi. One of the participants, a cosmopolitan business man and political leader, later mentioned that although he now speaks Otomi haltingly, as a child he spoke it fluently. An informant said that of the five most recently elected presidents of the municipio three can understand or speak some Otomi. At the present time 60 percent of the population of the municipio is bi-lingual in Spanish and Otomi.[3] Although I met only two monolingual Otomi-speaking people, according to Villeños, several of the remote hamlets of the municipio are populated by monolingual Otomies. The 1960 census figures indicate that, at that time, 11.02 percent of the population of the municipio (over five years of age) were monolingual Otomi speakers (Marzal 1969:8).

The clothing worn by Villeños during the summer months exhibits a range from city styles to traditional dress. In el centro (the plaza and main street), locally made city clothing predominates as does traditional clothing in the hamlets. However, much variation exists. For example, some of the ladies of the town have a mixture of city and traditional clothing which they wear on different occasions or even at the same time.

Business relationships between traditionally dressed Otomi speakers and

townspeople were frequently observed. These included daily sales of fruit, nuts, eggs, and milk to the storekeepers, restaurant owners, and the milk wholesaler. In one of the restaurants, the hospitality of food or beverage was frequently offered at the conclusion of a business exchange of significance. Traditionally dressed persons were also observed watching television or sharing an occasional meal with centro families. Individuals in town proudly spoke of their ability to speak, read, or write in Otomi, and others talked of Otomi grandparents.

Villeños formally address one another as don, doña, señor, señora regardless of style of dress or economic status. Adolescents speak to adults with respect, with no observable difference towards people of differing socio-economic status or life style.

A Federal Health Department Mobile Unit was in town during a one-week period in which all residents were encouraged to have chest X-rays. Long lines of people waited in the July sun as two nurses (local young women) collected the information necessary for the department's records. They initially spoke to each person with respect but did become impatient when someone could not respond to the questions regarding full name, age or barrio of residence.

Overt hostility was observed on one occasion. Two twelve-year-old girls were walking in one of the satellite villages and observed a young man wearing calzones (the traditional baggy trousers). He seemed to be drunk, and as he passed, the girls yelled tauntingly after him. Although I did not hear about such hostility frequently, a condescending attitude toward the people living as Otomies was evident. Three townswomen referred to the Otomies as "Inditos," and another expressed surprise regarding the presence of medical facilities in one of the rural communities, saying "but they are pure Indians--they don't speak Spanish." A young teacher said that the people of Villa do not speak good Spanish because the Otomi language has influenced their speech patterns.

Few families in the region surrounding the cabecera actively teach their children Otomi; some of the youngsters do learn the language through hearing it in the home. Most children and young people speak primarily Spanish and know but a few words in Otomi.

An hourly bus connects the community with two important market towns, both of which are less than one hour away, and also to more distant metropolitan centers including the Federal District. Transportation is also provided by a taxi service, several trucks and some ten privately owned cars. No newspapers or magazines are sold in Villa but some are obtained from other communities by townspeople and are then passed from person to person. News and information come into the community by other means as well. Almost every family owns a radio, and some own television sets. The influence of television goes beyond the more than twenty-five families who own sets because of the communal nature of watching TV in Villa. Friends and relatives drop into homes with television sets for an afternoon or evening of embroidering, talking, and watching.

The Project

General information about Villa was collected during the first three weeks in

the field. A genealogical study of the family of Señora Helena Olivera[4] (Family I - see tables in Appendix) was made in order to learn the names of some of the residents and their roles in family and community life. This genealogy later formed the basis of the field work project, and, as such, it was expanded to include additional, more distant, relatives. The research directly related to the project, which was undertaken during the second half of the field season, included visiting and interviewing members of each household indicated on the original genealogy, as well as seven of the households included on the expanded genealogy. In order to assess whether this extended family was representative of extended families in the community, information for an additional genealogical history of an unrelated townswoman, Señora Ursula Romero (Family II), was collected. Many of her kin were also visited and interviewed.

During the informal interviews aspects of material culture, such as housing and clothing as well as the language spoken, were observed. Questions concerning family economic, political and social life were asked only in conversations in which the family was relaxed and responsive to the interviewer. Seventeen households were visited once, another ten were visited on two or more occasions, and a few on an almost daily basis. Representatives of thirteen additional households were interviewed, during many casual conversations, in the homes of relatives. Ten of these thirteen households were located in distant communities and some of their members were in Villa for visits; three of the households were located in the municipio but household interviews were not possible.

Language spoken and style of dress are easily observable indices of the extent of Mexicanization; the use of the Otomi language and the wearing of traditional clothing suggest continuing involvement in Otomi culture. Increasing participation in the national culture is reflected by the extent of attendance in the schools, interest in the communications media, economic participation in the national economic structure, and geographic mobility, as well as city-style dress and the exclusive use of Spanish.

The type of relationship to the resources of production (land, fruit trees), service (corn mill, hotel) and distribution (store), such as ownership, medias,[5] or employment is one indication of economic position in the community.

Nine of the nineteen households of the extended family of Señora Helena Olivera included in the study were located in a small hamlet in the hilly desert outside of Villa. The population of this hamlet consists of patrilineally related families and one nonrelated household. Two of the nuclear families on the geneology occupied isolated homesteads in the hills near the hamlet. Four families resided at the edges of the barrios of the cabecera, and four households had residences on or near its main street. Six persons lived in and worked in other parts of Mexico, but returned to Villa frequently to visit. The economic and occupational range of the extended family included the owners of commercial enterprises and/or land, government employees, teachers, construction workers, those who farmed their own land or farmed milpas a medias, and day laborers.

All interviewed members of the Olivera family spoke Spanish. Thirty-four of the adults also spoke or understood Otomi, but nine did not. Five of the monolingual Spanish speakers were from other areas of Mexico, had married Villeños (or

one parent from Villa), and had moved to the municipio. Of the individuals designated as children (under 20 years of age, unmarried, and residing in the parents' household) 63 did not speak Otomi while 17 did have some acquaintance with the language. Among the adult members of the extended family, economic position did not show any correlation with a knowledge of Otomi. Both Otomi and non-Otomi-speaking Oliveras represented the entire economic range of the community. The members of the family's richest household, which also was considered to be among Villa's affluent, freely discussed their ability to speak Otomi, and expressed interest in their traditionally dressed, Otomi-speaking relatives from the hamlets surrounding Villa. All of the Olivera adults in these small rancherias spoke Otomi, except those who married into the community. In the cabecera, however, four of the seven family members who did not speak Otomi were born in the municipio. The Olivera youngsters from the centro were all monolingual Spanish speakers, but 17 of those from the edges of the barrios and rancherias, spoke Otomi as well as Spanish.

In this family, then, relationships seem to exist between style of clothing worn, locale of residence, socio-economic position and age. The eight Olivera teachers and business owners observed, who live near the plaza, wear city dress as does one young teacher who lives at the edge of town. In the rural areas, 11 of 13 married women wear traditional or semitraditional dress, and two young married women wore short fitted dresses. A mixture of city and semitraditional garb is worn by one woman of the family who resides in the centro, but traditional clothing is worn by three women residing in the barrios.

Several adults, in the family, particularly those of the rancherias, did not respond directly to questions regarding their own education, which suggests that their formal schooling was perhaps of limited duration. The educational range is extensive, but there is a correlation between residence and level of formal education. The six adult family members who had completed normal or prepatoria education lived in the cabecera, wore city dress and were teachers or business people. The Olivera children from the centro attend school through secundaria. Only one had terminated his education before completing the three-year program. One youngster had completed a year of normal, and two were to have entered in September, 1970. In the outlying areas, three of the children terminated their education at the end of the sixth grade, and six others terminated before completing primary school. The stated reasons for early termination of school were lack of interest and economic need, i.e., the youngster was needed to work on the fields. Five Olivera youngsters from the hamlets were to have entered secundaria, and three have been attending.

Termination at the end of the sixth grade may be due to the fact that the only secondary school facilities are in the cabecera and children from the outlying areas must walk long distances to the school.

Radios were observed in 12 of the 19 family households, including 6 of the rural residences. The three television sets observed were in the family households in the centro, which included teachers or comerciantes (tradesmen).

Although fewer members of the second extended family were interviewed, a

range similar to that of the family of Señora Helena was observed. Comparative data is presented in Tables I-XI in the Appendix. The two extended families are themselves connected, twice through marriage and once through marriage and compradrazgo (godparenthood).

Further examination of the genealogical histories reveals the presence of almost every family name in Villa, including those of the political and economic leaders. When questioned regarding the similarity of names, informants stated that they were distantly related to the rich and powerful of the community.

Recognition, concern and interest were expressed by the members of the two extended families for their relatives (including those from the rancherias). Frequent visits between women from outlying areas to women in the centro was observed in both families. A rural woman mentioned that her husband's godfather had provided employment for her husband and after-school work for one of her children. A visiting, educated young woman, whose parents live in the centro, said of the population of Villa and the surrounding area, "We are all of one family."

The following conclusions can be reached on the basis of these observations:

(1) Members of extended families in the municipio of Villa evince a wide range of cultural patterns.

(2) Mexicanized mestizos, living in the cabecera, have social, compadrazgo and economic relations with members of their extended family, whose lives are, to some extent, tradition-based, as shown in patterns of speech, dress and housing.

(3) There is an acceptance of the Otomi heritage among cabecera adults. The Otomi tradition, however, is not being passed on to their children, or even to many of the children of the rural areas who, speaking only Spanish, wear city styles, and are increasingly entering the national cultural mainstream through the Federal school system.

Culture Change

According to the Federal census of January, 1970, the population of the cabecera is 2,235 people, and the population of the municipio is 10,989 people. This represents an average increase of 1.2 percent per annum since 1960 when the municipal population was 9,113. In the previous ten-year period, Villa's average annual increase of 1.98 percent was condiderably lower than that of the national average of 3.54 percent (Marzal 1968:13,14). This indicates that the local population is growing at a slower rate than is the national population. This may be due to out-migration related to the inability to earn a livelihood which in turn is caused by the insufficiency of land and lack of employment possibilities. This was borne out in interviews with members of the local population, all of whom have relatives who have left Villa in search of employment. The lack of business-oriented in-migration can also be seen in the geographical origin of the business people; all of the business families interviewed were from the municipio of Villa except one, in which the wife's mother was from a neighboring municipio. According to Villeños, the business families, political leaders and landowners are members of "very old families" of the area; one knowledgeable informant could think of only two businessmen--storekeepers--who are not of local origin, and they are from a

neighboring municipio.

Household census data were collected from 32 households, in which there were 72 adults, 57 of whom were born in the cabecera or within a half-hour walk, 7 in neighboring municipios, 3 in the State of Hidalgo, and 5 in other parts of the nation. Of the five residents born out of the state, two were residents of Mexico City and owned a weekend home in Villa, two were women married to Villeños, and one is a grandson who had come to work in his grandparent's business. An additional factor suggesting the local origin of the population is the percentage of residents acquainted with the Otoni language; 62 persons--or 86 percent of the adults from whom census data were colledted--have some knowledge of Otomi.

The data thus suggest that the Mexicanization of the community occurred through acculturation rather than through an influx of mestizos from other areas. Leon-Portilla (1962:68) suggests two processes of acculturation in Mexican-Indian communities: "spontaneous acculturation" which occurs in communities near or under the informal influence of metropolitan centers; and "planned acculturation" which is the result of programs of culture change in which recently developed scientific methods and approaches are used to increase the level of economic and cultural participation of the population in Mexican life. Both processes of acculturation have been important and continue to be so in Villa.

The following description of the relationship between a hamlet,[6] the cabecera and urban centers is presented to facilitate the exploration of the possible avenues through which the national culture impinges on the Villeños. The hamlet is in the desert and is connected to Villa by a narrow foot path to a wider dirt road that runs into a paved street leading into the plaza. Twenty-six adults and 52 children make up the ten households, nine of which are related to Señora Helena, which constitute this small community. The members of each household farm some land the produce of which is used mainly for consumption by the family. Any available surplus is sold in Villa or in the Monday, Ixmiquilpan, market. Tomatoes and fruit are sold in the plazas of Villa and in another closer, small village to truckers. All of the families in the hamlet own chickens. At least five have cows and some keep goats. The eggs are sold to the storekeepers and restaurantours in Villa, and the milk to the milk wholesaler. However, a few families keep these foods for their young children. The economic ties of the hamlet bring the residents in contact with the nearby village, Villa, Ixmiquilpan and Mexico City, and incorporate them into the national economic structure.

The political relationships are complex and wide-ranging. The hamlet's primary connection to the national system is through the political structure of the nearby village of which it is a political subdivision. Each year the hamlet elects a juez (justice of the peace), responsible to the juez of the village, who collects the assessed contribution from each family of the hamlet to the annual village fiesta. He also organizes the communal labor force, which has improved the dirt road, helped to construct the communal corn mill, and assisted in bringing electricity to the area. The village, which was one of the six polling places in the 1970 national elections, is under the political jurisdiction of the cabecera of the municipio. The political relationships of the cabecera, in turn, extend to Zimapan.

to the state government in Pachuca and to the Federal government in Mexico City. Representatives from each of these political units, officials from the Federal Department of Education and local political leaders participated in a conference in Villa, in August of 1970, to discuss the needs of Villa's secondary school.

The children of the hamlet, as well as those of three additional small communities, attend the village school, which includes grades one through six. Those who continue their schooling go to the secondary school in the cabecera (grades 7 through 9) which is the only secondary system in the municipio of Villa. Of the 19 hamlet youngsters between the ages of 12 and 16, eight are attending secondaria. Many of the students who complete secundaria and wish to continue their education have to take the entrance examinations to enter the free Federal teacher training schools, for which they must leave the municipio. These students return to Villa to visit during their vacations and many return to teach upon completion of their education. The great interest in becoming a teacher, expressed by youngsters as well as parents, reflects the dearth of local employment possibilities. The most direct and least expensive means of rising in the Mexican economic, social and educational class structure is by entering the teacher-training program. Villeños estimate that 400 of their number have become teachers, many of whom still live in the municipio, and many of whom continue their studies in summer programs.

Job scarcity has led many of the men of the hamlet and the cabecera to leave, to seek employment, for periods of varying duration. This group includes the braceros, whose participation in the work programs in the United States was facilitated by Villa's proximity to a main road north. They returned to Villa with the money they earned but also with experiences about which they like to tell. The road and highway network also connects Villa with its satellite villages to the nearby market towns and the metropolitan centers of the nation.

The women of the hamlet frequently stop to chat with the women of the cabecera when they pass through for shopping or are en route to the bus. During August, one woman from the hamlet went to Mexico City to visit a daughter; another mentioned a visit to a son in a large city. Two cabecera women had recently visited relatives in the hamlet. The service facilities, i.e., hospitals of the cities, are used by the townfolk, and one family from the hamlet said that they had been to a doctor in Pachuca.

Many Mexcian tourists stop at Villa to market on their way to the spa, which is near the hamlet's source of drinking water, thus affording the Villeños and the residents of the hamlet opportunities for observation of these visitors.

Electricity was brought into the hamlet during the past year. Radios are ubiquitous. Although an Otomi program is broadcast from Ixmiquilpan, everyone observed was listening to music or the daily <u>novelas</u> (similar to 'soap operas'), which also are watched with great regularity on television. The radios and television programs are stimulating the use of Spanish, are disseminating Mexican national culture, and are communicating much information of an international nature.

Thus even the hamlet, a small isolated community, is plugged into the national culture and the national political and economic structure along many complex lines, all of which are conduits for spontaneous culture change.

Several public and private organizations have actively promoted programs of fundamental education, community improvement and planned culture change. The PIVM has given economic aid to the schools and the clinic, and has been active in the program of bilingual promotores. In this program local women are trained to assist monolingual Otomi youngsters to make the transition in school to speaking and learning in Spanish. Although the promotores are important in helping the Otomi-speaking youngsters to adjust to the Spanish language-oriented schools, the program must tend to discourage the use of Otomi. The Patrimonio has also played an important role in community improvement programs in the municipio, such as the large-scale irrigation project, the community corn mill, and the teaching of new skills, e.g., weaving.

A few years ago, the Federal government, through the Department of Education, established a Cultural Mission in a small village in the municipio. The Cultural Missions attempt to bring fundamental education to areas lacking educational and cultural facilities. In this village the effort included literacy classes for adults at night.

The Summer Institute of Linguistics has had linguists working in the municipio of Villa for at least fifteen years. The major thrust of their effort was directed toward translating the Bible into Otomi. In the process, however, they have taught people to read and write in Otomi, Spanish and English, and helped to develop bilingual Otomi-Spanish pre-primers for Otomi monolingual children who were unable to use the school texts. The work done in the community by the Summer Institute of Linguistics may have strengthened the pride of some of the local inhabitants in their Otomi background. The women of the centro who proudly told me of their ability to communicate in Otomi also mentioned friendships with Summer Institute of Linguistics workers who had lived in Villa.

Comparative Material

A pattern of social relationships similar to that of Villa emerges from the material written about the Tarascan village of Tzintzuntzan, a community on the Lake Pátzcuaro shore, which in 1964 had a population of 2,000 (Foster 1964:108). Although in pre-Columbian times it had been the Tarascan capital, after the Conquest it dropped out of the national cultural mainstream because a cathedral was established at nearby Pátzcuaro, which also became the area's important market town. Tzintzuntzan was described in the nineteenth century, as a poor, Indian, pottery-making town. Modern facilities, such as electricity, running water, a trade school, and a road connecting it to Pátzcuaro and Morelia, were brought to the village in the 1930's, when it was also designated the cabecera of the municipio (Foster 1948:21,176). Although Spanish was the primary language of the cabecera in the 1940's, Tarascan was spoken by a few people, and was used in the satellite hamlets of the municipio. The inhabitants of the cabecera, though proud to be mestizos, were "conscious of their Tarascan background". Foster (1964:41-47) wrote that in 1945 most townpeople wore mixtures of city and Indian clothing, and a slight correlation was noted between clothing worn and language spoken. As in Villa, most of the population of Tzintzuntzan was born there; of the 145 residents who were of

outside origin, 95 came from local villages, 46 from communities in the state of Michoacan, and 8 were from other areas of Mexico. Programs of culture change were effectuated by the Franciscans at the time of the Conquest. During the past forty years the Federal government and the Summer Institute of Linguistics and more recently a UNESCO project, have participated in programs of culture change and fundamental education in the area of Tzintzuntzan. The inhabitants have also had commercial contact with the national economic structure through the markets, particularly those at Pátzcuaro. In Tzintzuntzan there is no residential separation between Mexicanized inhabitants and those whose lives are still somewhat tradition-based. Relations between members of the two groups are polite and cooperative (De la Fuente 1952:85). One of the recent presidentes of the municipio and many other municipal officers speak Tarascan. The avenues of change, from traditional to Mexicanized, are open and no sharp divisions are drawn. There is, however, some condescension toward the Indian. In Tzintzuntzan terms of reference such as "los naturalitos" were used in a patronizing manner (Foster, 1948:81,33).

In the Tarascan village of Durazno, on the other hand, mestizo-Indian intergroup relations have been marked by hostility and, at times, have been extremely violent. During the 1880's, Indian lands in Durazno were lost to a Spanish company which established an enormous hacienda, upon which the now impoverished Indians had to work. The political life of the area, by the 1920's was controlled by these "Iberian" landlords, rich mestizos and churchmen (Friedrich 1965:190-191).

Rodolfo Stavenhagen, in his analysis of Indian-mestizo relations, considers that controlling groups attempt to maintain such "colonial relationships" to insure their continuing economic dominance. The dominated group can respond in several ways, based on the prevailing social, economic and political situation, such as withdrawal into "corporate communities" or with hostility and violence as seen in Durazno (Stavenhagen 1965:74-75).

Conclusion

The population of Villa is largely of indigenous origin. Most of the owners of the resources on which production, distribution and service are based are native to the area and aware of their Otomi background. The Mexicanization of the population began, and is rapidly spreading and increasing in depth, as a result of continuing economic and political contact with nearby cities, the penetration into the community of the national educational structure, the rapid proliferation of the communications media, and the government programs of community improvement and planned culture change. This is reflected in the families studied where each extended family represents a wide range - from traditional to city Mexican. In addition, almost the total economic and political range of possibilities in Villa is present in the extended families studied. Communications and relationships within these families occur across cultural lines.

It appears that in a community in which the mestizos (particularly those who control the wealth) are of local origin, there is awareness and acceptance of their traditional background and maintenance of kinship-based relationships with the still traditional population. In these communities the intergroup relations

are of a polite and cooperative nature although the Mexicanized group may be patronizing toward those whom they consider less developed culturally.

The Tzintzuntzan materials indicate that similar processes and concomitant social behavior have occurred there, thus suggesting that the patterns observed in Villa are not unique to that community. In Durazno , on the other hand, where the economic and political control was held by immigrant hacendados, violence and hostile intergroup relations occurred.

In order to further substantiate my hypothesis, study in Villa, along the following lines is suggested:

(1) Examination of historical records with regard to the original settlement of the community, population movement, pre-revolutionary land control, etc.

(2) Interviews with all of the economic and political leaders of the community in order to understand their economic relationships with the surrounding traditional population, to trace their family relationships and their geographic and cultural origins.

(3) Completion of the genealogical study, the household census survey, and observation of economic interrelationships in order to understand the intersection of the economic and political structure with the cultural range of the community.

It would also be instructive to compare these results with a study, along similar lines, of a community of Otomi background in which the economic and political structure is controlled by nonindigenous mestizos. Such a study may shed light as to the possible relationship between provenience of the population economic power and intergroup relations.

Notes

1. The name assigned to the community in this paper is fictitious to insure the privacy of the inhabitants.

2. The field work for this paper was done in Villa, Hidalgo, during July and August 1970 under the auspices of the Ixmiquilpan Field School, Washington State and Oregon Universities.

3. Information provided by the office of the presidente of the municipio.

4. Names of all persons living in Villa have been changed. For purposes of clarity the name Olivera has been assigned to Doña Helena's extended family although many family members in the genealogy could not and do not, in reality, have the same family name. The family name Romero has been assigned to Doña Ursula's extended family.

5. Medias is a system of rental similar to that of sharecropping. An owner gives the right of usufruct for a one half share of the produce.

6. The hamlet and village will not be identified.

Appendix

Codified data regarding extended family members included in the study.

Table I Number of Households Included.

	Family I	Family II
Villa Residents-Hslds.[1]	19	11
Non-residents-Hslds.	3	7

1 Residence is assumed to be in the municipio of Villa unless otherwise specified. Villa resident abbreviated to V.R. and non Villa resident to N.V.R.

Table II Birthplace of Heads of Households.

	Family I		Family II	
	V.R.	N.V.R.	V.R.	N.V.R.
Villa-Cabecera	13		14	7
" Municipio	21		4	1
Hidalgo	5	4	2	3
Elsewhere in Mexico	2	1		

Table III Locale of Households.

	Family I	Family II
Villa - Center[2]	3	2
" - Barrios	5	8
" - Rancherias	9	1
" - Isolated	2	
Cities in Mexico	3	6
United States		1

2 The plaza and the paved road leading through it to the highway.

Table IV House Types of Villa Residents.

	Family I		Family II	
	Cabecera	Municipio	Cabecera	Municipio
Stucco	7	1	9[3]	1
Cement Block		1		
Brick		3		
Mixed, Piedras, etc.		5		
Carizo and Organo	1	1		

3 One residence was not observed.

Table V Household Facilities

	Family I		Family II	
	Cabecera	Municipio	Cabecera	Municipio
Separate Kitchen Structure[4]	3	7	3	
Electricity	8+	9+, 2-	9+	1+
Water	6+, 2-	11-	9+	1-

4 Constructed of carizo and organo.
+ Means facility is present. - Means facility is absent.

Table VI Relationship of Adults to Resources of Production, Distribution and Service. Includes both males and females.[5]

	Family I	Family II
Owns	9	8
Rents (medias)	6	2
Employed	13	2

5 Some individuals fall into more than one category.

Table VII Occupations represented (Primary and Secondary)

	Family I		Family II	
	V.R.	N.V.R.	V.R.	N.V.R.
Farmer	15		6	
Comerciante	2		7	
Construction Worker	4			
Teacher	5	5	2	1
Electrician				3
Laundress	1			
Jornalero (day laborer)	1		2	
Service Employee	2			
Federal Employee[6]	1		1	

6 Other than teacher and electrician.

Table VIII Clothing Worn by Observed Adult Residents

	Family I				Family II			
Residence	Cabecera		Municipio		Cabecera		Municipio	
Age	20-40	40+	20-40	40+	20-40	40+	20-40	40+
City Styles								
Women	1	3	2		3	3	1	
Men	3	2			1	1		
Semi-Traditional								
Women	1		2	2		3	1	
Men		1		3		1		
Traditional								
Women	1	2	2	5	2		1	
Men						1	1	

Table IX Knowledge of Otomi

	Family I		Family II	
	V.R.	N.V.R.	V.R.	N.V.R.
Adults +[7]	34		18	2
-	9	5	3	9
Children +	17		9	
-	63		30	6

7 + indicates knowledge of Otomi. - indicates no acquaintence with it.

Table X Knowledge of Otomi - Family I - Age - Residence

	Family I					
	Cabecera		Municipio		Non-Resident	
	+	-	+	-	+	-
51+ years	3	1	11			
41-50 "	2	1	6			
31-40 "	3	1	4	2		2
21-30 "		4	5			3
2-20 "	4	20	13	4		

Table XI Knowledge of Otomi - Family II - Age - Residence

	Family II					
	Cabecera		Municipio		Non-Resident	
	+	-	+	-	+	-
51+ years	6		1			
41-50 "	7				2	
31-40 "	2					1
21-30 "		3	2			8
2-30 "	5	30	4			6

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MARKETING BY FEMALE VENDORS IN MEXICO

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Este papel trata de un estudio de las mujeres comerciantes en los mercados del Valle de Mezquital. La descripción de una cabecera municipal--Actopan, con 12,000 habitantes--situada al lado de una carretera principal, subraya su importancia como centro de una red de mercados menores enlazando los pueblos de alrededor. Un análisis de los puestos en el mercado semanal de Actopan revela un patrón significativo en el uso del espacio para la venta de los diferentes productos de la región. Se enfoca el estudio sobre una familia de comerciantes que se dedica a la compra y venta al por menor de las artesanías. Aunque el negocio es propriedad de la familia entera, el trabajo y la responsibilidad han quedado en manos de las mujeres. Se ha escogido una semana como ejemplo, con viajes diarios a distintos mercados (incluyendo el de la capital), las actividades de esta familia, sus gastos y sus ganancias. Tambien se nota el calendario de mercados festivales, locales y nacionales, que supone un tipo de negocio distinto y adicional al de los mercados semanales. Una comparación de las actividades de dos vendedores de productos fabricados a máquina ilustra que las mujeres que venden artesanias dependen más de las relaciones personales con sus clientes y atribuyen más importancia a los factores sociales que a los economicos en su conducta comercial.

The setting

Actopan, in Nahuatl 'tierra gruessa y fertil' (Molina:9), has been connected to the central government power ever since the days of the Aztecs during which time its importance is attested by the tribute rolls of the empire. It continued to play a central role during the period of colonization and, since the Porfirian regime, the town has been linked by railroad to the state capital. By the mid 1930's, a major road stretching from Mexico City to the northern border town of Laredo had been constructed, and once again it did not bypass Actopan.

The town is located in the southern-most part of the Mesquital Valley, on slightly elevated ground, next to the alluvial soils whence comes its name. The rich soils are irrigated which makes it possible for the area to be one of the major national producers of tomatoes and alfalfa. Land is owned by small scale farmers, and by a few big land owners who may rent it, and/or cultivate it. The tomato season which starts in March and ends in August, provides jobs for men from neighboring villages and towns.

The physical description of the town is not unlike many other Mexican market towns. It has a public square bordered by the church - part of a monastery built by the Augustinian friars in the sixteenth century, and by various shops. There are public, private (elementary) and secondary schools, two movie theatres, a maternity center, three doctors in residence, (although there is no certified dentist) and unlike other towns in Mexico but quite common in the Mesquital Valley, a Protestant house of worship.

Daily activities are conducted in a leisurely manner. The shops open around 8 or 9 a.m. and close again at 8 or 9 p.m. with a two-hour lunch break in the afternoon. In the smaller shops, calendars of past years still hang as decorations, and those of the present year show months already passed. Clocks too, do not show the precise time and many of them are out of order.

The main road which passes through Actopan and marks one of the town's boundaries, constitutes another "center" whose activities are unlike those mentioned previously. Here, there are two large restaurants that also serve as bus depots for the long distance bus lines, a large gas station and a number of repair shops located on both sides of the road. The restaurants and the repair shops are open round the clock. By 6 a.m. people are already waiting for local buses to take them to their places of work or to the markets in the neighboring towns, and lines of trucks are waiting at the gas station to be refueled. There is also a hotel here, which is primarily used by the long distance truck drivers who, during the tomato season, come to transport the product to other distributing centers. And here, calendars hanging in the restaurants show the correct day of the month, and the electric clocks testify the arrival and departure of buses.

The population of Actopan has been rapidly growing in the last thirty years. The national censuses show, that whereas its total population was close to 3,000 in 1930 and only slightly increased in 1950, it has doubled every ten years since that time. The latest 1970 figures show a round figure of 12,000 inhabitants.

The people consider themselves Mestizos and they are nationally oriented. There is, however, a small number of people who do not consider themselves, nor are they considered by others, as belonging to this ethnic group. These are Spaniards and Lebanese whose numbers are small[1] but their importance is considerable for they are the owners of the largest businesses in town.

The Spaniards, Gachupines (the Old Colony) and more recent immigrants, are the owners of large stores whose main service is to provide the land owners with fertilizer and seeds. But they are also stocked with merchandise that one could find in a good U.S. hardware store (excluding the pots and pans) in addition to all the necessities for the construction of a building, and new parts for trucks or automobiles.

The Lebanese group consists of a number of paternally related families. The original, nuclear family of this kin group came to Actopan from a nearby silver mining town where they were merchants. After the mines were depleted of its mineral, the family was forced to look for a more prosperous community. Once reestablished, the patriarch of the family brought other kin to Actopan and helped them become the owners of clothing, yard-goods, and furniture stores, a hotel, a movie theatre and a tile factory.

The rest of the shops in town are owned by the Mexicanos. These include the centrally located, relatively large size food stores, where nationally known brands of canned goods, sweets, liquor, etc., can be purchased. There are also the medium size specialty shops such as bakeries, tortillerias, and shops where fruit and vegetables, meat, gifts and school supplies are sold. Finally there are the very small ones, often set up in the owner's front room, where the immediate neighbors can buy refreshments, matches and other small but necessary items. In addition,

there are the cobblers, the beauty 'parlors', barbers shops, and radio and TV repair shops, as well as a number of pharmacies.

The mechanic repair shops located on both sides of the main road have been there since the construction of the road in the 1930's. They provided services for the long distance vehicles passing by. But in the 1950's a modern highway was constructed west of Actopan and the traffic was diverted to the new road. The shops would not have survived this change, had it not been for a new development that followed it - the mechanization of farming. In this agricultural oasis of an otherwise dry area, the farmers began to use tractors, and trucks are now used exclusively for the transportation of farm products. Thus, the repair shops are once again thriving by providing services to their local customers.

The Market

Another commercial activity that cannot be overlooked is the weekly, Wednesday market. It is located in the central plaza from which it spills out into the adjacent streets. By making a map of the market showing the stalls or stands of the different items sold, I was able to classify items into categories of factory made goods, crafts and edibles. A further attempt was made to classify each into local or non-local products. Such a map revealed a certain pattern of distribution, and, by counting the frontage of these stalls, I made a rough estimation of the amount of space occupied by the items of each category.

The most numerous stalls are those exhibiting factory-made goods. About 789 m. of ground are occupied by the stalls selling clothing, yard-goods, hats, shoes and notions; some 96 m. for stands of second hand clothing, hardware and leatherware; and a further 84 m. for stands exhibiting household goods such as tin pots and pans, flatware, china and other containers. Crafts take up 278 m. of space of which 80 m. belong to locally made artesanias, 141 m. to pottery, 57 m. to woodwork and 75 m. to guaraches (sandals). Pottery comes from various regions; woodwork and sandals are produced in Actopan and in other nearby towns such as Ixmiquilpan, but may also be brought from other regions.

In the category of edibles, those of grains, mostly corn, and a large variety of legumes and dry chile are the main items occupying 456 m. of ground, followed by local and non-local fruits and vegetables taking up 393 m. These have been classified together for it is impossible to separate them since both are sold in one stall. There are also the exotic fruits and vegetables, such as bananas, coconuts, pineapples, etc., that occupy 117 m. of ground space. Local fruits and vegetables occupy 168 m. This figure might be slightly high because the space is occupied mainly by the sellers. There are the small scale, women retailers who come with baskets filled with seasonally grown items such as prickley pears that are picked from their back yards, or mesquite pods collected from a nearby tree. Finally, there are the few stands exhibiting candles and medicinal herbs that are provided by the Indian women.

In addition to the mapped-out stands, there are also those that provide restaurant services, and ambulatory retailers selling notions, fruits, vegetables and ayates (carrying-cloths), who, by constantly circulating, avoid paying for the space

that they would otherwise occupy. Livestock, including goats, sheep and pigs are sold on the streets south of the market place.

There appears to be a certain pattern of locational distribution of the items sold. If the plaza is an indication of the market's centrality, which we believe it is, then we see that factory-made wear goods occupy not only the largest area in terms of space but they are also the most centrally located. Another indicative fact is that the small retailers mentioned above, and recognized by their colorful traditional Otomi dress, occupy the encircling area of the plaza. It is also here, at the main entrance to the market (the corner of Zaragoza and Guerrero Streets) that Otomi men and women sell, on foot, their most popular product-ayates. Thus, it is the factory-made goods and the remnants of the traditional Otomi market that we see in the plaza.

The latest extension of the market appears to be on the streets of Robellado and 2 de Abril to the north. The stands and stalls here do not conform to a pattern; they are erected because of lack of space in a more central area.

Market retailers are either professional, or part time workers. The former have a strict five, six, or seven day schedule, while the latter go to one or two markets a week and the money that they earn is an addition to the family's regular income. The major part of my summer Field School training program was spent investigating a family of professional market traders, who were the retailers of artesanias or locally made crafts. It is to this subject that we next turn.

The Caballero Family

Artesanias is a general native classification for items made by hand, but when the term is used specifically, as we will be using it, it refers to items made from century plant fibers, reed, twig, palm and yarn. The products sold in these stands include mecapales (head bands for tying on loads), ayates (loosely woven cloth for carrying bundles), morrales (shoulder bags), sacks for grains, nets for gathering alfalfa, a variety of brushes and scrubbers, ropes, loin and yoke straps, and martingales, all of which are made from the century plant fiber. Items made from reed are the petacas (containers for tortillas) and bird cages. Other items made from twigs are baskets and those from palm are petates (mats), hats, and brooms. Finally, there are the woven and embroidered bags or purses of all sizes, and belts, and the traditional embroidered Indian blouses.

There are ten artesania stands in Actopan's market of which four belong to residents of the town. All four are related by blood, and their professionalism as craft market traders can be traced to four generations.

Hernandez and his wife were born, married and died in Chicavasco, seven kilometers south west of Actopan. According to their daughter, Doña Magdalena, they were traders of articles made from the century plant fibers, whose market network extended from Pachuca to Tula and to "the state of Puebla." Doña M. took over the business after the death of her husband, and her daughters, Hermelinda and Adela, were trained from their early youth in the trading business. Hermelinda's marriage brought her to Actopan and, soon after, the rest of the family followed the daughter's footsteps. The two remaining children, after marriage, established their own

households and the mother, Doña M., went to live with her youngest daughter Adela, with whom she still lives. The two daughters continued to be retailers; their brother Andrés makes his living by working in the fields.

The succeeding generation has already produced the following retailers. In Hermelinda's line Helia is planning to set up on her own after her impending marriage; in the line of Adela, Cristina has a stall of her own and has become the family's main retailer; Juana, Andrés' daughter, has been working as retailer for many years. Thus, in Actopan's market, the artesanías stalls are the property of Doña M., Hermelinda, Cristina and Juana.

But one must not think that they are individually owned; rather, they are the property of the family, for all able unemployed members are expected to help towards the maintenance of the stall. Hermelinda's Roberto goes with his mother and sister and his main responsibility is to set up the stands at the beginning of the market day and to take them down at the end of it. This includes stretching out the roof for the stand, unpacking, lifting the heavy items, and helping to arrange the display. In the other families, the same activities are performed by Jesús, when he is not selling fruit in the same market, Manuel, Felipe or Andrés. In other words, the family functions as an economic unit.

Our example shows that retailing of crafts has been primarily a women's occupation. It is one of the few outlets available for women through which they can support a family, for in the case of the two sisters, their husbands (who are living in other households) do not contribute to the family's expenses. There is another significant fact, namely that men who work in the market are exclusively fruit vendors. This is the case with Hermelinda's married sons Miguel, and Eladio, Adel's Jesús, and often Miguel, and André's Felipe. Whether the reasons for this fact are economic or cultural, I could not tell for they were not investigated.

One Week in the Life of Cristina C.

In order to understand more fully what is involved in being a retailer, we next present a description of activities performed by Cristina during a period of one week.

Monday - Ixmiquilpan

At 6 a.m., Cristina and her brother Manuel, together with other people from the town board a bus at the main road of Actopan to go to the Monday Ixmiquilpan market. By the time the bus reaches Ixmiquilpan's main plaza at 7:45 a.m., it is crowded with people carrying baskets full of edibles that will be either sold or eaten during the day.

Soon after, Cristina is at her usual place where her stand will be erected. It is an opportune time for breakfast since the merchandise from Actopan has not arrived yet - it is brought by a man who owns a truck and who delivers it on his way to his regular job.

In front of the market, there are the "restaurant" stalls emitting odors of their prepared specialties; chicken in its broth, barbecued lamb enveloped in maguey leaves, rice with sauces, coffee de olla and hot chocolate. Cristina breakfasts on a bowl of caldo (soup) and a breast of chicken that lies on the bottom of

the bowl, which she consumes with tortillas and hot sauce, and finishes her meal with a jar of coffee, all of which costs her 5.50 pesos.[2] Her next meal will be in the evening when she will return home, although she will probably have a refresco (soft drink) around noon.

Her first purchases are factory-made henequen lassos and morrales that are obtained from a supplier of all the artesanías retailers. He parks his loaded truck at the outskirts of the market and the retailers go there to make their purchases. This is the only supplier who does not come to the stalls to sell; rather, the retailers must go to his truck to buy from him. There is no bargaining and the buyers know how much they will have to pay. Cristina purchases 12 lassos and 44 morrales, and she pays 45 pesos for the former and 90 pesos for the latter. When reselling them her minimum price will be 6 pesos for a lasso and 5 pesos for a morral.

The Otomi Indians, the suppliers of the rest of the products bought here, are now circulating. To buy from them will be Cristina's main job today. A man from Decá, carrying two heavy sacks asks 50 pesos for the pair, but Cristina offers him only 40. The man is not satisfied and moves on with his unsold items. A half an hour later, he comes back and sells them to her for 42 pesos; she will resell them for 50. A supplier of Otomi traditional hats from Alfajayucan whom she knows well makes his delivery of 19 hats. She asks how much and he answers: "You already know." She pays him 47.50 pesos and will resell them for 4 pesos each. There is another regular purveyor, a woman from Progresso who delivers 12 bird cages for which she receives from Cristina 22 pesos; they will be resold for 3.50 pesos each. There are now the women from Tasquillo with their woven and embroidered purses; they too are regular suppliers. She buys a large number of purses of various sizes, patterns and quality paying to them a total amount of 504 pesos. By 11 a.m. she has bought all she needs and her purchases have amounted to 935.50 pesos.

By noon the market is buzzing with people and this pace continues till 1.30 or 2 p.m. when it is time to eat and time to visit. In the morning, when she was buying, she was friendly to her suppliers, but there was no time to chat with them. Now that the pace has slackened, she talks to them if they happen to pass by and offers to them figs which she has picked from her yard, or on other occasions peaches and nuts that were bought in other markets for a good price. She chats with her neighbors and makes short visits to friends who also work in the market. At 2:30 p.m., a local band strikes up a jovial tune and by 3:15 the retailers begin to pack and take down their stalls.

Cristina had bought many heavy items, too heavy for her or Manuel to handle, and so she asks a man to do the packing. For his service she pays him 3 pesos. The delivery of cargo to Actopan costs her 9 pesos, and for the stand to the town of Ixmiquilpan she pays 5 pesos. Thus, her expenses of the day, with the return bus ticket to Actopan, come to 32.60 pesos, and her sales amounted to 82 pesos. There was not much profit made this day, nor did she expect to make it, but what was bought will be sold in other weekly markets of the yearly fiestas.

Tuesday - Tlahuelilpa de Acampo

The market of Tlahuelilpa has a very different character in comparison to the market of yesterday. Its most obvious differential characteristic is peoples'

dress. There is no traditional Otomi garb here, nor does one see the ayates that are carried by men and women in Ixmiquilpan. Here, everyone wears factory-made clothes and shoes, and women adorn themselves with rebozos (shawls). It is no wonder that the most popular stands are those that sell second-hand clothes. There are only two of them, but they are large and throughout the day there are never less than 24 people at any time browsing in and around them. This market is much smaller and its activities begin at a much later hour. By 9 a.m. the retailers are still setting up their stands. The zenith of the market's activity is at 2 p.m. However it is not till 4 p.m. that the social hour begins, and it is not till 6 p.m. that the retailers begin to leave for home.

Cristina's family has set up two stalls, one attended by her mother and another by her. Yesterday, while Cristina was in Ixmiquilpan, her mother also went to sell at the Mixquiahula market. The only item purchased in Tlahuelilpa is reed baskets that are bought from her supplier. At the end of the day, sales made at both stands amount to 356.60 pesos, for baskets, 122 pesos were paid; and the expenses of the day for the two ladies came to 46.10 pesos.

By the time they return home it is after 8 p.m., but no matter, tomorrow is a leisurely day for the market is in their home town.

Wednesday - Actopan

This, too, is not a market which starts early; at 9 a.m. it is just beginning to move. All of Cristina's family members help to carry merchandise from home to the stalls which is a distance of two blocks. From 11 a.m. to 2 p.m. is the busy period, after which it slows down for a time of eating and visiting, and by 5 p.m. the only signs of the market are its refuse.

There are at least two members of the family at the stand at any time, one for selling (done by Cristina) and the other for talking to the visitors who are present at the stand throughout the day; the pleasures of the latter are performed by the mother - Adela. And it is a much more leisurely day, for they feel "at home." The other members of the family come and go; Maria-Elena stops to chat on her way from her office to the bank; Jesús appears to inquire what is for dinner; and the two youngest mill about near by. Only Marcos, of whom all speak proudly, is not in sight for he is attending a military school in Mexico City, but is soon expected to spend a two week vacation with the family.

Purchases amounting to 378 pesos are made from the Chicavasco suppliers of ayates, ropes and woven belts, and from a woman who weaves plastic baskets. Sales for the day amount to 147.20 pesos.

Thursday - Atotonilco el Grande

As the crow flies, Atotonilco is only 25 kilometres from Actopan but by road it is 68 kilometres with the inconvenience of having to change buses at Pachuca. It is a two and one half hour trip, and Cristina starts her day at 5 in the morning.

It is a very small market that snugly fits into the town's plaza. Little does she sell here; rather, she makes the trip primarily for purchasing petates that can be bought in quantities from a supplier who buys them from the purveyors and resells them to the retailers. By the time Cristina goes to see the man, the

petate selection is limited. Evidently, the demand for them was high today and there are only a few of them left. Cristina takes the remaining 18 petates; this means that the day was not very profitable. Expenses for two (herself and Manuel), including transportation of merchandise, amount to 65 pesos, for the petates 60 pesos were paid; and her sales, rather high for this market, come to 147.70 pesos. Leaving the market at 4 p.m. she should be home before 8 p.m.

Friday - Jilotepec

It is a long three hour ride to Jilotepec with two bus changes; one at Tula and the other at the crossing of Tepeji. The reason Cristina goes so far is because there are no closer Friday markets.

It is a very large market whose character is unlike those described above. In the periphery of the market, where the buses make their stops, there is a large number of stalls selling the regionally - made cheese, cream and hot chocolate. These provide breakfast for the passengers and, later in the day, lunch when the market rests between 2 to 3 p.m. A great variety of things is sold here. There are many fresh flowers such as lilies and gladiolas, and a good selection of mushrooms. In addition to the folk medicinal herb stands, there are also stalls exibiting new kinds of herbs. In order to acquaint the passers by with the curative or preventive powers of these herbs, salesmen loudly hawk their wares with persuasive oratory and the help of lurid examples such as a variety of bottled "intestinal worms" that were killed or forestalled by the intake of these herbs. Or again, there is a man expounding on the medicinal wonders of fruits and vegetables whose power lies in their preparation; and for that he is selling a book whose contents include such curative recipes as carrots for head aches, oranges for intestinal disorders, or lettuce for rheumatism.

The traditional Otomi dress of this area differs from that worn at Ixmiquilpan. The women's costume consists of a white long sleeved blouse tucked in a gathered, black or blue woolen skirt that is held to the waist by a colorful wool sash. A quechquemitl is worn on top of the blouse, a robozo covers the shoulders and a factory made hat or two - one on top of the other - covers the head. The Otomi language that they speak is also of a different dialect.

There are thirteen artesania stalls here, and nothing is purchased by the retailers, but everything is sold. Cristina gives credit, ranging from 5 to 50 pesos to her old reliable customers, which is then paid back within a period of 15 days. It is only here and in Actopan that merchandise is sold on credit, for in the other markets people are not so reliable. The five parties to whom credit is given are all relatives, but live in different villages; it is during the market day that they all meet. Their "home" area for the day is next to Cristina's stall and the reciprocity in terms of food between them and Cristina is prominent.

Sales for the day, including credit, amount to 269 pesos and 54.90 pesos were spent for the expenses of Cristina and her brother Jesus.

Saturday and Sunday - Mexico City

These are the days when Cristina, often taking her five year old brother for the sake of company, packs in a small sack the woven purses and belts purchased from the women of Tasquillo and Chicavasco, and takes a bus to Mexico City. There are two alternatives as to the place where she can sell her items to the tourists;

either in the park of Chapultepec or at the market place of Xochimilco, whose market days fall on Saturday and Sunday. She prefers the latter for it is not as exhausting as the former where she must be on her feet at all times.

But observing her in the Xochimilco market, it becomes clear that there is another reason for her coming here rather than her going to the park; namely, the market environment. She is not a stranger to its schedule nor to the market people's behavior. It is true that she sells primarily to tourists, but they are only a very small minority of the total market population. They are the people, usually foreigners, who are bused from Mexico City by the travel agencies in order to see a Mexican market place. Consequently, they are the strangers; it is the market that dominates them and not they the market. We did not observe Cristina at the park, but we tend to think that in its environment the situation would be reversed.

Her sales for a day amount to 230 pesos and she expects to sell for about the same amount the following day.

It is impossible to determine precisely the family's weekly net income from one week's observation, for many items bought are sold only during the fiesta markets, and no account is kept of the existent stock. However, according to Cristina's information, it averages about 400 pesos per week.

Fiesta Market Calendar

Cristina's weekly schedule is altered only by the fiesta calendar which usually falls on weekends. If however, fiestas fall on a week day, as often happens with the national holidays, other family members will take her place in going to the regular weekly market. In other words, the Monday-Friday schedule is regularly guarded and the fiesta markets are additional.

Fiesta markets can be divided into local and national fiestas, and it is during the former, especially those that fall during the agricultural months of August, September and October, that more profit can be made.

Annual Fiesta Calendar

August	8	- (Tepetitlan)
	15	- (Tetepango)
	24	- (Doxey)
	24	- (Chicavasco)
September		- first Friday - (Magdalena)
	15 & 16	- national holidays - (Mexico City)
October	9	-
	16	- (Zacualtipan)
	23	-
	29	-
	30	- (Huejutla de Reyes)
November	1	-
December	12	- Virgin of Guadalupe (Dia del los Inditos)
January	6	- The Three Kings
Feb. or March		- Lent - carnival (Arenal)
2nd Friday of Lent		- St. Augustin - (Mesquititlan)
5th " " "		- (Arenal)
June	13	- St. Antonio - (Tultitlan)
Corpus Cristi		- (Mexico City)

With a few exceptions the items sold in the local fiesta markets are the same as those sold during regular weekly market. These include the fiesta at Magdalena where only morrales are sold as receptacles for the walnuts that abound in the market, and the weekends at Zacualtipan and Huejutla de Reyes where the selling of baskets and petates is closely related to All Souls' and All Saints' Days.

For this occasion food is offered to the dead souls; a variety of edibles is displayed on the table till the following day, when it is believed they return to the world of the dead. It is then that the food is distributed in small baskets among the many compadres that one has. As many as eight baskets are bought by a family during this time. The petates are also bought for the souls so that they could comfortably rest while in the world of the living.

During the national holidays, a variety of items are sold. On September 15 and 16, woven purses and belts are taken to the Zocolo main square in Mexico City. The month of November is spent in preparation for "el dia del los inditos", which includes the making of Otomi traditional costumes, or more correctly, what is believed to be the traditional costume, for children. During this day all Mestizo children wear this costume to go to mass and, afterwards they are taken to be photographed. These costumes are sold every day from December 1 to 12 in Pachuca by Cristina, in Tepatepec by Maria-Elena and in Mixiahuala by Sra. Adela. Before the holiday of the Three Kings, plastic toys are added to the artesanias stalls. An attempt has been made to incorporate the selling of gifts before Christmas, but it was unsuccessful.

Concerning the local fiesta markets, we are faced with an important question that bears further investigation. What are the reasons for the choices made as to the location of markets? Why is one market preferred over another? Why travel so far as Huejutla during the month before All Souls' Day? It is clear that the choices are based on factors other than the economic ones, such as social and/or cultural. Such an investigation would therefore reveal the interaction between economic and other cultural systems, or the predominance of one over the other.

The Retailers of Yard-goods

In order to see the differences in market behavior, if any, two other retailers were briefly observed and interviewed. They were the sellers of factory-made yard-goods.

The market schedule of an Actopan resident - a man who is the owner of a large stand is as follows: Monday - Ixmiquilpan, Tuesday - Tlahuelilpa, Wednesday - Actopan, Thursday - Tulancingo, Friday - Mexico City, to buy supplies, Saturday - rest, Sunday - Tula; there is no additional fiesta calendar. The other retailer - a woman, sells only two days a week, in Ixmiquilpan and in Actopan, and the money earned is an addition to the family's regular income.

Material is purchased in Mexico City from the distributing stores located on the streets of Correo Mayor, Correjidora and Carranza. Discount is allowed only when purchasing in quantities which are beyond the pocketbook of a market retailer. Thus, he buys and resells it in pieces of three meters. The relations between the buyer and the seller are impersonal and businesslike. The store owner, during the

day sees hundreds of small town market retailers pass by, whom he does not know and to whom he can not risk giving credit.

There is also a mistrust as to the ways of the city on the part of the retailer. The city is a stranger to him, and he knows it only in relation to the location of the stores from which he buys. Only when safe in the bus, on the way to Actopan, does he begin to relax.

The most significant difference between the two types of market retailers - artesanias and yard-goods - is that the former, in most cases, purchases his goods directly from the purveyor while the latter buys them from a middleman. Because of this fact, personal relations of a special sort exist between the purveyor and the retailer but not between the middleman and the retailer.

The purveyor - retailer relationship is advantageous to both parties. The purveyor is guaranteed his weekly income, and his risk of not selling the product is eliminated. Also, in the case of emergencies he can borrow money from the retailer and pay him later with the usually delivered item. The retailer, on the other hand, can specify what his needs are, as to size, shape, color, and design. In addition, if money is short and he knows that the demand for a particular item will be large the following day, he will ask the purveyor to leave his items and wait for the money till the following week. Thus, the relationship also functions as a sort of insurance policy. These relationships are nurtured during the market's "social hour" when food is given by the retailer to his purveyor.

This dyadic relationship does not exist between the retailer and the middleman. In the case of artesanias retailers, the lassos, morrales and petates are bought from such men, and we have seen that petates, if in demand, will not be put away for Cristina. And in the case of yard-goods, they are bought not only from strangers but also in a hostile environment.

The dyadic relationship between the Otomi purveyor and the market retailer is clearly illustrated in our example, and it could be defined as a <u>pratik</u> relationship (Mintz:1961). But unlike the Haitian experience, it does not tie together middleman and middleman.[3] Consequently, we would tend to believe that the markets in Mesquital Valley do not operate solely on <u>pratik</u> relationships as they appear to do in Haiti.

The interpersonal relation between the purveyor and the middleman raises questions that can be answered only by further field work. Is this type of relationship characteristic of those dealing in cottage industries or can it also be found between people who deal with other products such as the locally produced perishables? Is it a behavior characteristic of a peasant and a small scale distributor? If it is the latter, the markets in the Mesquital Valley are a fusion of the ways of the peasant and of the modern economic man, and to fully understand them we need to approach them from the institutional and the environmental (Polanyi:1957) as well as the formal economic (Burling:1962, LeClair:1962) point of view.

Notes

1. The national census of 1960 show that there are 95 people who are born in countries other than Mexico.
2. All amounts are in Mexican pesos: 1 peso = .8 U.S. cents.

3. The relationship between middleman and consumer, prominent in Haiti, was not investigated in our case.

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SELF-HELP AND DIRECTED CULTURE CHANGE IN AN OTOMI VILLAGE

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Este articulo describe un pueblo Otomi de Mexico que tiene sus 710 habitantes dispersados por el monte peñascoso y dependientes de una economia basada en el maíz, nopal, maguey y frijoles. Un resumen de las tecnicas de trabajo de campo antropológico enfoca en las dificultades de establecer el rapport y las expectacionés de un pueblo que ha tenido prévia experiencia de antropólogos investigadores. Se presenta un análisis de dos tipos de cambio cultural: el uno, llamada 'ayuda propia', en mayor parte por las mujeres Otomies que han montado un negocio de bordados; el otro, llamado 'cambio dirigido', originado por agencias oficiales y privadas en pro del fomento economico.

Introduction

In this paper, I will discuss various aspects of directed culture change within the Otomi Village of San Antonio Sabanillas, Hidalgo, Mexico. Special emphasis will be given to those processes which I term self-help. By that, I mean those actions taken by villagers to promote changes which they perceive to be of direct benefit to themselves and their village[1]. Directed culture changes simply refers to the attempts by outside agencies to rearrange some condition of established village life (Foster, 1969).

Before being placed in the field setting, I was informed that several agencies were involved in trying to help the Otomies in the Mezquital Valley[2]. I was curious if any such agencies would be operating in San Antonio Sabanillas where I would be placed. I felt that a village in competition with other villages for available goods and resources would have a maximizing strategy for promoting or retarding directed culture change.

Two short descriptive statements follow which deal with; (1) the physical and cultural setting of the village (2) the methods that I utilized in the field.

Physical and Cultural Setting

San Antonio Sabanillas is an Otomi Indian village located on a dirt road 14 kilometers from Ixmiquilpan and 6 kilometers from Cardonal in the arid part of the Mezquital. Politically, San Antonio Sabanillas is a pueblo in the municipio of Cardonal, in the district of Ixmiquilpan and in the state of Hidalgo, Mexico. Administratively, San Antonio Sabanillas is divided into six manzanas (neighborhoods). These are Binghu, Deca, Cerro Colorado, Quizpede, El Boto and El Centro. All of my fieldwork took place within the manzana of "El Centro."

The region around El Centro, like all of San Antonio Sabanilas, is that of semi-desert both in climate and vegetation. Rainfall is around ten to twelve inches a year, most of it occurring in May and June. The area is essentially that of rocky hills covered with many types of cactus, maguey and lechugillas. But El Centro itself lies in a small valley formed by two ridges which enclose it on both sides; behind it is a dominating mountain - Cerro Juxmaye, (2400 meters). El Centro lies

at an elevation of 1745 meters so that the nights are cool and the days are hot (Marzal 1968:21). To say the least, the area around El Centro is inhospitable but the small valleys serve to catch the infrequent rainfall which makes cultivation possible.

The main crops that are raised in these valleys are maize, nopal, maguey and frijoles. One can also find occasional trees of figs, peaches, apples and mesquite.[3] Maize is the main crop raised by each family along with frijoles that form the mainstay of the village diet - tortillas and beans. Nopal is the prickly-pear cactus which is raised mainly for its fruit, the tuna, which is sold in the market. The cactus leaf, stripped of its spines and cut into strips, is eaten locally; it tastes somewhat like string-beans. Because the nopal takes three to five years to produce tunas for marketing, it is usually only raised by individuals who have sufficient land available to make such a long term investment. However, every family that I talked to raised some maguey, mostly for the production of pulque, a mild intoxicant[4]. The maguey is used to produce Ixtle from the fiber of its leaves and is also fed to the livestock.

Of forty households surveyed, thirty eight household heads owned their own milpas (fields)[5]. The remaining two males worked as laborers (peones) for $7-$10 pesos a day. Thirty four raised only maize and four raised some nopales. All thirty eight had milpas of maize and maguey. The majority (24) had only 1-2 milpas. Eight more men had 3-5 milpas, another five had 6 milpas apiece. One man, identified as the wealthiest in the village, owned 8 milpas. In San Antonio Sabanillas, all of the lands are private, there being no ejido lands. Private land not in use (lying fallow) can be utilized by the community at large for grazing stock until such time as the individual owning it decides to use it again.

As a general rule, maize is grown on the lowest flat lands where the soils are least rocky and where water can be caught. Nopal is grown higher up on the slopes of hills since it needs less water to grow. Maguey can be grown in both areas - on hillsides and in the valleys. In the valleys, it is grown in rows almost like hedges where it functions to separate milpas and to hold the soil in place since terracing is a common practice. On the hillsides, maguey is grown randomly. Maguey is grown not from seeds but from the cuttings of small plants growing at the base of large plants (Manrique 1969:691). Indeed, the seeds in the quiote stalk that forms when the maguey is fully mature are often roasted and eaten as a delicacy. Beans are grown on the same land as maize.

In the spring, (late April or early May) the lands for maize and beans are cleared of grass, weeds and stones by cattle-drawn steel plows and men using shovels and hoes. Once the sod is broken, maize is planted either every other seed with beans or every other furrow. The land is then cleared of weeds again after about a month when the sprouts of corn are four to five inches high. This is done one more time once the corn is knee high. If the rain is sufficient, the corn and beans are harvested in late September or early October. It must be stressed that cultivation in the arid region is quite precarious and is at the subsistence level. Maize does not always grow to maturity. In El Centro, I was told that they had only one successful crop in eight years. When this happens, corn is fed to the stock.

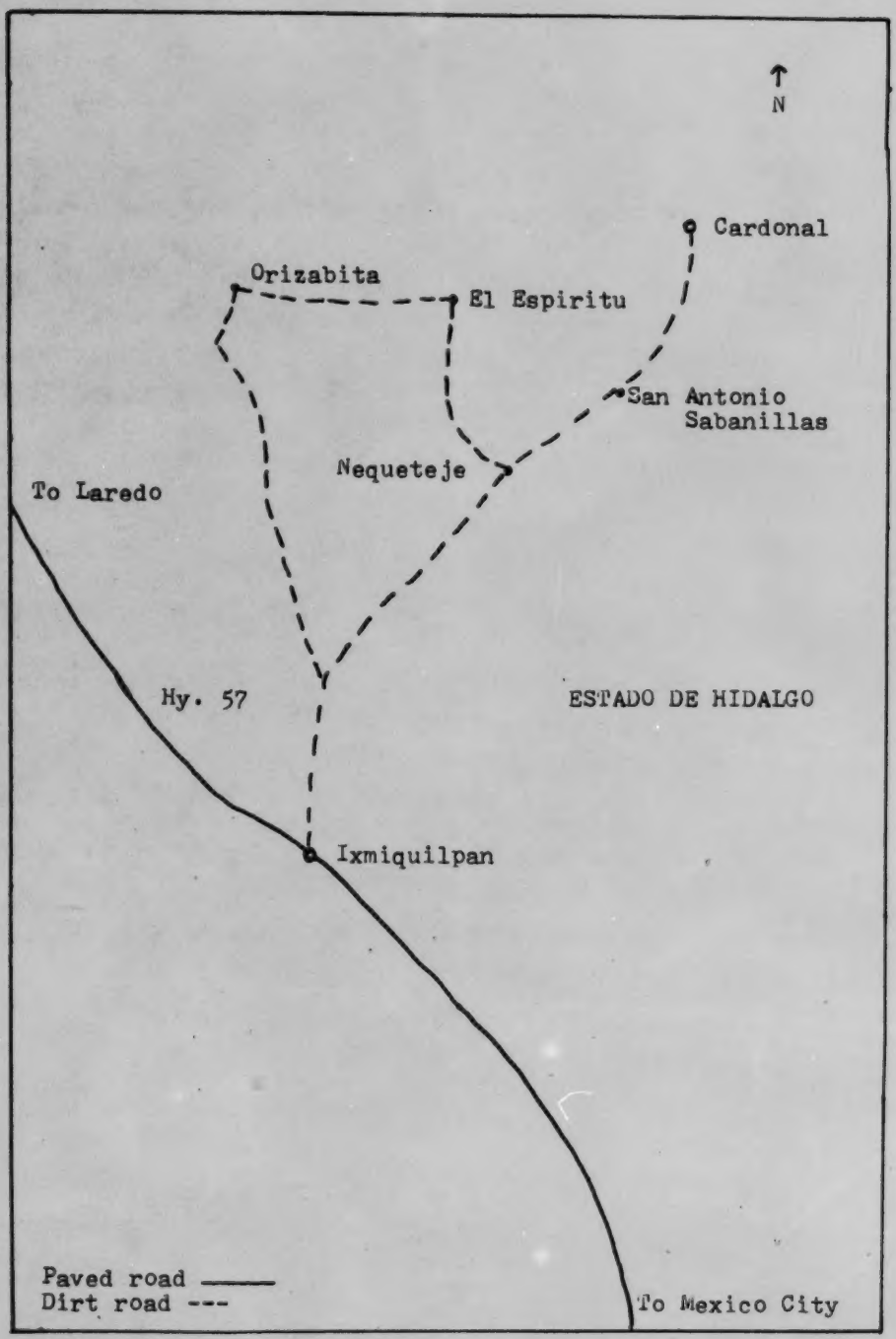
N
Cardonal
Orizabita
El Espiritu
San Antonio
Sabanillas
Nequeteje
To Laredo
Hy. 57
ESTADO DE HIDALGO
Ixmiquilpan
Paved road
Dirt road
To Mexico City

Figure 1.

All of the cultivated products are consummed locally and with the exception of tunas and ixtle none are sold in nearby markets. The months of June and July were unusually wet in 1971 and the people were looking forward to a generous crop. When they are not so fortunate, they are forced to buy their corn in the market at Ixmiquilpan ($1.20 pesos a liter). In order to acquire cash, people sell some of their animals.

There was not a single household that I surveyed that did not raise chickens and/or turkeys. Those bring $15-$20 pesos in the market. They also provide eggs in the village. Of the forty households surveyed, 12 raised goats, 15 had 1 or more pigs, and 5 households had cattle. Goats and cattle were grazed either on hillsides or communal lands. However, maguey and mesquite beans were the prime source of fodder for animals. Except on the rare occasion of a fiesta, animals are not used for meat - they are usually sold in the market to obtain cash for a family.[7] Cattle are used for tillage and are frequently rented to neighbors for $20 pesos a day. Women and small girls care for the herds of goats and pigs whereas boys and men take care of the cattle. Although chickens and turkeys are allowed to roam freely, there appeared to be no difficulty in determining who owned what bird.

The villagers of San Antonio Sabanillas are Otomi and are considered to be Indian both by themselves and by outsiders.[8] In Mexico, a person is considered to be an Indian if he speaks an aboriginal language, practices more aboriginal than European customs, and thinks of himself as an Indian living within a recognized aboriginal community apart from his mestizo neighbors (West and Augelli 1966:315). Certainly, from what I could observe, this village fulfilled these criteria.[9] All of the people with whom I made contact spoke Spanish and Otomi, but the degree of proficiency in Spanish varied considerably. The Otomi, according to the criteria given by Wolf (1955:453-54), are also peasants. They are agricultural producers who control their land and who aim at subsistence rather than investment. Peasant society also indicates a structural relationship as it relates to some integral larger whole. According to the 1970 state census, there were 710 persons residing in El Centro, 373 men and 337 women. The average household size was 6.9.[10] Most of these people were dispersed over the surrounding hills. El Centro refers to a small aggregate of buildings - 8 family dwellings, 3 stores that function as pulquerias, and three uncompleted houses adjacent to the road going to Cardonal. The village is dominated by a seventeenth century Catholic Church of the Dominican order but there is no priest. In addition, there is a 6 grade school, a dispensaria (medical clinic - not staffed) and an unfinished, clothing factory, a chicken hatchery, and teachers quarters. Water is obtained from a well. El Centro functions as the main manzana of a non-nucleated Otomi community.

The major political offices of the village, by order of importance, are the judge (Juez), the representative (representante) and a commissioner (commisionado). The judge makes decisions regarding the internal affairs of the village. He is empowered to call into being communal work projects (faenas) and to determine the work to be done. He may call village meetings (juntas) when group decisions or discussions are necessary. The Juez also may render decisions in cases not amounting to damage over $100 pesos or serious injury to a person. In such situations

the legal cases are tried in a municipio court. The commisionado serves to enforce the decisions of the Juez. He gathers men for the faenas and helps explain and support the opinions of the Juez in the Junta. The commisionado is appointed by the Juez annually. Both the Juez and representante are elected from the village at large each year[11]. By contrast, the representante is concerned with external affairs of the village. He deals with outside administrative agencies and is a figure in the village. Younger men learn their political lessons as a Juez or commisionado and if they prove themselves they later may become a representante.

The basic Otomi social unit is the nuclear family, many of which form part of an extended family with loose ties (Manrique 1969:713). Compadrazgo is also common, adding valuable fictive kinship links. To be sure, the nuclear and extended families are basic economic units, the men cooperating in the cultivation of crops and the women sharing activities centering around the maintainence of the home. One may perceive a general division of labor between men and women but, it is not clear cut in this subsistence economy. Women frequently work in the fields and men may make native products such as ayates and costales. Despite the dispersed settlement pattern, social interactions among kin are frequent and animated, for life is short - a mere 42 year expectancy among the Otomies. Households are seldom composed of more than 3 generations. In the past, the village was highly endogamous. Today with roads, buses, trucks, schools, radios and other modernizing influences, village endogamy has given way to regional endogamy.

Field Techniques

I arrived in San Antonio Sabanillas with the prior consent of the village leadership. My field director had made contact with the village officials to see if they would be willing to endure the inquiries of a stranger for some seven and one-half weeks. Permission had also been arranged with regional authorities.

Once in the field, it was necessary to establish arrangements for food and lodging, In this, the Juez was quite congenial. On the first day, he and other villagers were helpful in my settling-in but displayed a rather passive demeanor toward my presence. Somehow, more fanfare seemed in order. I later learned that a Mexican anthropologist had preceded me in the village two years earlier. The people knew from experience that I was interested in their customs, a situation that had its advantages and disadvantages. People would ask if I wished to know about their customs and I easily took advantage of their preconceived notions of my expected role behavior. Also, in Mexico the term antropólogo has gained a fair degree of prestige--even in remote Indian villages[12]. The label carried its own message with mixed results. Frequently, people thought I should only ask the questions that the previous fieldworker had asked or had not asked. I was expected to consume as much pulque as he had, a task that proved to be formidable. Overall, I felt that I could adopt a ready made role.

The main techniques of gathering information were participant-observation and open-ended unstructured interviews. I started as an observer, but within about five weeks I was participating in many community activities. The first four weeks were spent mainly in building proficiency in Spanish, making maps, and taking genealogies,

household surveys. Then with some social credit and language skills I participated with the men in faenas, juntas, and in the fields. These proved to be the social settings where interaction could be maximized.

Most of the information gathered came from the families in or nearest to El Centro, for they were the most accessible and most willing to interact with me. Secondary data were invaluable. I also interviewed non-indigenous persons who were working in the village to promote economic change and I examined the census data available in Cardonal. I found that a camera was useful for generating interest in my work among reticent persons, particularly young people and women.

The use of open-ended, unstructured interviews was the most efficient for eliciting information. Household data were gathered in this manner. Interviews were rarely completed in one sitting. Due to a quite varied working pattern in the village, it was necessary to piece together the interview based on the availability of informants. In order to acquire needed information, I would accompany men to the fields in the morning and interview women and children during the middle of the day. Field notes were written usually in the late afternoon during the siesta period or very late in the evening. Early evening was generally spent talking to the men in the local pulquerias where gossip and shop talk was the order of the day. In this manner, a composite picture was gradually put together regarding house hold and community life. This technique of handling my time seemed to be more fruitful than a rigid schedule.

Self-help and Directed Culture change

A great deal of change is now taking place in El Centro. According to informants, before 1957 there were no buildings in the area except the church. At that time the Patrimonio assisted in building a small school. My chief informant moved to El Centro in 1959 so that his child could more easily attend school. His was the first house in the central area which has continued to grow to its present form. It has been assisted in its growth by the aid of various external organizationa as well as through self-help projects in the village.

Throughout the 1960's the Patrimonio sought to develop a series of public works in the Mezquital Valley. But the arid part around San Antonio Sabanillas and Cardonal was generally neglected until the last few years. The road to Cardonal was improved and, in 1970 electricity was extended to Cardonal. Villages along the route could get electricity if they provided labor for the construction of concrete poles. (Wood is so scarce that it is rarely used for this purpose.) El Centro chose to introduce electricity and conducted a series of faenas to acquire it. This was but one of many opportunities by which the village has taken the path of self-help in order to change.

Over a three year period (1964-67), all of the manzanas cooperated to reconstruct the tower of the church which had fallen into disrepair. As a result of this initiative, the leadership of El Centro petitioned the regional office of the Ministry of Education in Pachuca for a larger and better school. This was granted in 1967. Again, the village provided the labor and the Patrimonio provided the materials. A school with grades 1-3 went into operation in 1968. Three more class-

rooms were completed by 1970. The village now has a complete 6 grade elementary school. There is even talk of a high school that may be built in the future, either in San Antonio or in Cardonal. Moreover, the Patrimonio is assisting the village to build a small clothing factory which will employ 15-20 men. Several young men are now going to the Patrimonio school in preparation for this.

It is clear that the village leadership has worked hard in developing their region by their own efforts. This follows from the number of faenas and juntas that I saw in operation. These took place at least once a week, if not more frequently. I was told that it took many years for this regularity to develop. Many of the surrounding villages, in fact, do not hold faenas or juntas. I would again stress that these occur with respect to what the villagers consider important and not necessarily what an outside agency would stress; but they often coincide.

The village has worked not only with official government organizations but also with a number of private agencies in the area. The Evangelical Church sends out missionaries with food and clothing every 6 to 8 weeks. I asked the Juez about this occurrence when I observed a Protestant sermon being given (San Antonio is nominally a Catholic village). He replied that the least the people could do was listen to the "very nice sermon" since the clothes and food were very helpful to the village. This was all rather coy, I thought, but effective.

Another organization that has been very helpful is the Organización Nacional Ayuda Otomi. This grew out of the Christian Family Movement in Mexico City which was made up of upper middle class persons and students. It started in the early 1960's. Philosophically, its guidelines were to help the poor in some practical manner. Although a lay organization, its activities were coordinated by the Catholic Bishop of Tula.

ONAO began working in San Antonio Sabanillas in 1964. Their most obvious accomplishment was the building of the Dispensaria (clinic) which came into use in 1967. Since then the Bishop has arranged that some of the German missionary staff in Cardonal operate it when there is a need. One of the other projects that ONAO assisted in was the construction of a chicken hatchery. This is now operated by 3 families, mainly for a cash profit. One of the more interesting projects began by members of this group is that of embroidery manufacture.

According to Marzal (1968:147) many women in San Antonio Sabanillas know how to embroider. This is a skill that is passed on from mother to daughter and as such may be considered a native industry. One may see this skill reflected in the blouses worn by the women. They particularily prefer to embroider the arms and neck of the blouse and frequently the bottom of the skirt. This embroidery generally consists of such decorative designs as flowers, birds or geometric forms. Manrique (1969:706) has remarked that this is a pre-hispanic technique of weaving and is retained only among the less acculturated Otomi. Whether this is true or not, I cannot say. But bordados (embroidered work) appeared to be prevalent throughout the area around Ixmiquilpan as illustrated by a trade fair during the summer of 1971.

Unfortunately, one of the problems of a native industry, from the point of view of economic development, is that it only exists for natives. Even though a

skill is possessed, that skill needs a market if the native community is to obtain maximum economic development. Two women from ONAO were able to provide the market.

When ONAO first began working in the village with a group of sixteen persons (on week-ends and holidays), there was very little organization, few guidelines existed as to what people should do. Most of the volunteers are involved with the completion of the Dispensaria. But 2 women, being familiar with embroidery, decided to see if they could sell a few items to their friends. This was the beginning (1964) of what is now an extensive operation.

In 1964 only 2 women made bordados. In 1967 there were 90 persons involved. There are now 160 women working in this native industry dispersed throughout the entire pueblo of San Antonio Sabanillas and beyond but mainly clustered around El Centro.

Recruitment has gone through three phases. First, friends of women working were recruited--if they wanted to work. Second, women were selected on the basis of family or personal need. The Juez was initially asked to select these women but it quickly became apparent that he was selecting only his friends. A third approach has been devised by the women themselves. The older and most influencial women have formed a committee that now selects new applicants for work, - a selection based on skill and, of course, friendship. This seems to work effectively and, more importantly, the women are making their own decisions. If a women no longer wishes to work, her place is taken by someone else chosen by the committee. The number of women working is determined directly by the amount of goods that can be sold and how much money is available for the payment of wages.

The women work on a variety of patterns. All the material is provided to them by the members of ONAO. The amount of work is equalized so that each woman makes about the same wage, about $40 to $50 pesos every three weeks. Material for embroidery (thread, cloth, needles) is brought every three weeks and the finished product is picked up. The raw material is purchased in Mexico City. Size or particular shape of a pattern is left to the discretion of the individual worker and can be completed as her own time permits. Additional raw material cannot be obtained until a woman completes her current work. The general rates for work vary with complexity of design, but the estimated average payroll over a three week period is $8000 to $10,000 pesos. In villages at a subsistence level of economy, this is a considerable amount of cash input.

Once the embroidered materials are collected in the village they are returned to Mexico City where they are washed and ironed and finally sewn into a finished product for distribution and sale.

These products are sold mainly in a store operated by the women who started by selling to their friends. This market quickly ran dry and in order to continue it was necessary to seek wider commercial contacts. Their store is situated in Mexico City and operated on a non-profit basis. Their prices are established to cover the cost of store operating costs, material, labor for the embroidery, and labor of ironing and washing. This store has been in operation since 1965 and its own commercial success dictates the number of women that can be employed in the village. To expand their markets the store owners are now selling on consignment

to other stores in other cities as well as to individuals in two foreign countries.

The store operators told me that they hope to continue this as long as it appears to continue to help the village. But they hope that in the future a broader market base can be developed so that any fluctuations in the market will be cushioned and not directly felt in the village. They also expressed a hope that the Patrimonio's Departamento de Fomento Economico, whose function it is to develop local industry in the Mezquital, will be able to take over some aspects of their program so that it will become more of an Otomi industry than it now is. Nevertheless, it is the women of San Antonio Sabanillas who have shown what they can do by way of self-help for the village and their families.

Future Research

There are several possibilities in a village such as I have already described where so much seems to be happening. But there are at least three processes that I would like to follow up in El Centro.

1. What will be the short and long term effects of bordado commercialization and the new clothing factory (under construction) on the indigenous subsistence economy of the village?

2. What are the mechanics of decision making and building of esprit de corps in a village that decides to change itself?

3. What are the relationships between public and private agencies concerned with development and their impact with respect to promoting change in a rural village?

APPENDIX A.

1. Population in San Antonio Sabanillas as of 28 Feb. 1970.

Men = 373 Women = 337 Total = 710

2. Population evolution in San Antonio Sabanillas - Totals.

1950 = 173 1960 = 453 1970 = 710

Percent of change: 1950-1960 = 162%
1960-1970 = 57%

Source: Official census 1970
State of Hidalgo
Municipio of Cardonal

3. Population of San Antonio Sabanillas by age: 1966, N=626

Age	Number	Percent
1 yr. and less	21	3.2%
1-4 yrs.	108	17.2%
5-9 yrs.	99	15.8%
10-14 yrs.	67	10.6%
15-19 yrs.	53	8.4%
20-24 yrs.	65	10.3%
25-29 yrs.	54	8.4%
30-34 yrs.	34	5.9%
35-39 yrs.	37	6.0%
40-44 yrs.	20	3.1%
45-49 yrs.	18	2.8%
50-54 yrs.	14	2.2%
55-59 yrs.	13	2.0%
60-69 yrs.	8	1.2%
70-79 yrs.	6	.9%
80 and more yrs.	4	.4% (after Marzal 1968:125)

APPENDIX B.

1. Distribution of women involved in bordado production. N=160

Place	Number	Place	Number
El Centro	80	Cardonal	1
Bingu	30	San Nicolas	1
Cierro Colo.	12	El Espiritu	2
Quixpede	13	El Sauz	1
El Boto	9	Nequetaje	1
		Other	10

2. Price list of items in "Jamadi" store in Mexico City.

Item	Cost (in pesos)	Item	Cost (in pesos)
Basurero	$46.00	Carpeta-chica	$80.00
Cigarrera	$15.00	Carpeta-media	$90.00
Rebosos	$68.00	Carpeta-grande	$160.00
Cojin redonda	$90.00	Placemats	$18.00
Delantal	$30.00	Bookmarks	$8.00
Agenda Doble	$62.00	Headbands	$14.00
Baby dresses	$38.00	Napkins (4)	$36.00
Pillow covers	$55.00		

Notes

1. Let me make clear that by self-help I do not mean progress. While many persons from outside the village, who were helping, saw their efforts as progress, the villagers simply told me they were helping their own village.

2. The Mezquital Valley is northwest of the Valley of Mexico and occupies about 40% of the area in the state of Hidalgo. Most of the valley is over 5000 feet high. Since most of this area is in the rain shadow of the central plateau in the south, and ringed by the Sierra Madre in the west and north, the region is a semi-arid desert. Annual rainfall is less than 12 inches (Bernard 1968: Introduction). It is in the arid part of the Mezquital that we find the Otomies predominantly. Of 85,000 Otomies in the Mezquital, 90% live in the arid zone (Bernard 1968:Ibid).

3. These are not found as orchards but as isolated trees usually higher up where the water runoff is greatest. The fruits are used to supplement the diet. Mesquite beans are also eaten by people for their sweet juices but are essentially fed to livestock.

4. Pulque is made from the fermented sap of the maguey or aguamiel and collects in the center of the plant once the heart (corazon) has been cut out. This takes place at maturity (5-7 yrs.). The aguamiel is then extracted and added to other pulque in large clay jars. This is usually consumed locally. A family member will collect the aguamiel twice daily--early morning and late evening. It is ready to drink within 4-5 hours after being added to other pulque. Pulque sells for .60¢ centavos per liter in the village. Adults and children both consume it daily (adults 3-5 liters a day). Pulque is reported to be the main source of Vitamin B in the Otomi diet (Bernard 1968:Ibid).

5. Each milpa approximated one hectare of land. But due to a variety of shapes, it was difficult to ascertain exact sizes. It was more feasible to rely on what the owner estimated his land size to be--as this is what he paid taxes on.

6. This is the same basic type of implement introduced in the sixteenth century by Spanish. It has changed little since then and is widely used in the arid part of the Mezquital Valley.

7. Protein is derived mainly from beans, or from limited rabbit hunting that men did in the surrounding hillsides. Two families also raised pidgeons.

8. In modern Mexico, the Indian population constitues only about 5% of the total

(2-3 million of 49 million). However, the Otomi are one of the more resilient aboriginal Indian groups in Mexico in and around the central plateau near the Valley of Mexico (Manrique 1969:685).

9. Fuente (1952:79) used the following criteria for distinguishing a Mestizo from an Indian. By order of importance, they are:
   a. Locality of birth
   b. Language
   c. Illiteracy
   d. Indian surname
   e. Costume
   f. Custom
   All of these criteria fit in some degree the setting under discussion; (a) and (b) have the greatest relevancy. The other factors vary more with the age of the informant.

10. Interestingly, the local Juez continued to give me 1960 census figures throughout my stay. The 1970 figures were gained from the official census kept in the office of the mayor of the municipio of Cardonal.

11. The office of Juez is a rotating position that is filled with a new man each year on Jan. 1st. One may serve more than once but not in succession. However, the job of representante can be filled by the same man over several years because it is considered to require special talents. It is also clear that certain families dominate in political influence. During the time of my fieldwork, men filled all of these political positions. When I inquired of the men if it were possible for a woman to be elected to some political office, they told me that it was not prohibited. But they also informed me that only men are allowed to attend the juntas.

12. I interpret this as a measure of the success that the National Museum of Anthropology has had in its promotion of the traditional life-ways of Mexico. Of course, the Mexican government has stressed the links with the past, the rural, and the Indian in their nationalization programs. Thus anthropology has been accorded a good deal of public prestige in Mexico.

13. Colloquially, this is referred to as the Patrimonio. It is a federally supported organization, begun in 1952 to aid development in the Mezquital Valley among the Otomies. Its full title is the Patrimonio Indigena Valle Mezquital (PIVM).

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CULTURAL ASPECTS OF DIET IN EL ESPIRITU, HIDALGO

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Este artículo trata de la relación entre niveles de prosperidad y alimentación en un pequeño pueblo Otomí en el Valle de Mezquital. Algunas de las 81 familias han sido colonizadas en el Centro, otras permanecen dispersas. Una gran parte de los habitantes son Protestantes (Evangelistas) y uno de los propósitos de este estudio fué aislar la religión como un posible factor determinante para diferenciar el régimen de alimentación. Datos sobre el promedio de alimentación corriente semanal fueron escogidos por medio de una encuesta verbal, basada en los inventarios de las tiendas. También se coleccionaron datos sobre las distintas fuentes de ingresos como los oficios de jornalero, ayatero, maestro et cetera, y también sobre la propriedad de tierras. Las familias que se dispersaron tienen un régimen alimenticio mas básico y menos variado y son menos prósperas que las familias del Centro. Prosperidad resulta en una expansion mas bien que en un cambio de dieta.

Introduction

The area called El Espiritu took its name from the old Spanish church, dating from the last century, which lies in its geographical center. Bordered on the east and west by a chain of low hills, this dry rocky land was dispersedly settled, by about 90 families, the furthest houses lying one-half hour or so walking distance from the church in the center. In other words, El Espiritu is about one hour walking distance in diameter.

In the late 1950's the Patrimonio Indigena del Valle de Mezquital (a government development agency) began a "colonization" program to concentrate the people in the center (el centro) of El Espiritu, partly to provide them with services not available to a scattered population. The church land, which had been expropriated by the Mexican government, was divided into lots and distributed to those families who wished to move into "town." Agua potable (potable water) was installed in the centro, a six room pre-fab school constructed, and future streets marked. Recently, electricity was brought in.

According to the 1971 faena sheet[1], El Espiritu has 81 families, 35 of whom have colonized in the centro, although they may retain their former houses near their milpas and huertas (fields); 37 who live near their fields, (afuera); and 9 families who live along the gravel carretera (road) with access to transportation and electricity but at a distance from the school and drinkable water.

El Espiritu has three manzanas or affiliated settlements, one of which is El Olivo. This paper will concern itself with this manzana for the purpose of comparison. El Olivo has been traditionally richer than El Espirtu -- "a Maestro (teacher) in every house" say the people of El Espiritu. About 40% of the people of Olivo are Evangelistas (Protestants). The houses of El Espiritu are made from the typical Otomi organo (organ pipe cactus), or rock homes with one room or two

separate units, dirt floors and open hearths; in comparison many homes in El Olivo are "ranch style" with decorative brick fronts, porches, rose bushes and flower gardens, cement floors, glass windows, doors with doorknobs and furnished with store-bought furniture - beds, tables, chairs, televisions and even gas stoves.

It seems to be a commonly held belief, at least among non-Otomi, that Protestants are wealthier than the Catholics in Otomi communities because they do not drink pulque (fermented juice of maguey cactus) and do not waste their money on drink and the church. In doing this study, we were interested, among other things, in comparing El Espiritu and her richer manzana El Olivo to see what difference in the traditional Otomi diet prosperity would make and the possible reasons for this difference in wealth. Was religion the determining factor? Was the Protestant ethic and sobriety responsible for El Olivo's prosperity?

Having read Boyd (1969), we had expected a rather simple, almost unvarying diet. As the people of El Espiritu invited us in to share their meals, we were surprised at the variety of food we encountered and impressed by the careful preparation of Otomi meals. We decided to collect recipes and data on Otomi food attitudes and food preparation. However, this will have to be the subject of a later article; the present paper deals only with the relationship between prosperity and diet based on data obtained in the food survey.

Survey Construction

From experience in carrying out a diet survey in San Francisco, we knew that it is difficult to ask people to keep a list of every item and its quantity that they buy during the week; in the case of the Otomi, illiteracy would preclude this approach. However, people who are living a fairly stable, routine life tend to consume the same basic items each week. Just as the Latinos in San Francisco usually do their shopping one day each week, the Otomi have their market day.

Monday is market day in Ixmilquilpan. Thousands of people from surrounding villages pour into town to do their weekly shopping and socializing. Buses pass through usually isolated villages to pick up goats, pulque and people bound for Monday market. As their land is not suited for self-sustaining farming[2], the people of El Espiritu depend on this weekly market even for their staples (corn, chiles, beans, etc.). In Ixmilquilpan the El Espiritueños sell their pulque, tunas (prickly pears), ayates (ixtle woven cloth), occasional embroidery or goats. With this money and the money they earn as day laborers in town, or as peons in irrigated areas, or occasionally as construction workers in Mexico City, they can buy what food they need for the coming week. The Otomis are frugal and careful shoppers. Because of the lack of refrigeration and the shortage of money, an Otomi usually buys exactly what he will need for the coming week.

Consumption therefore is easy to calculate by means of a verbal survey. However, we found that merely to ask people to recite from memory their "shopping list" was to allow for a significant amount of unintentional omissions. So we went to several families initially and asked them for a memory recitation and combined these preliminary lists until we had what we considered a list of all the food items generally consumed in El Espiritu. For comparative purposes we were interested in

average weekly food consumption, not the unusual or rare food purchase.

We also used store inventories as guides for drawing up our survey. In these little shops (3 in El Espiritu, one in El Olivo), people do their supplementary shopping during the week, usually for items they run out of. (See Table I: Store Inventory.) Milk is not sold in El Espiritu but is sold in El Olivo. We did not include milk on our survey in El Espiritu; we were assured by shopkeepers as well as others that no one in El Espiritu drinks milk -- not even the milk of their own nanny goats. Because of the cultural and status implications of milk, we felt that in El Espiritu the question of milk consumption would be intimidating.

We then had a list from which we could ask our diet survey. In El Espiritu either of us would go from house to house accompanied by an adolescent from the pueblo; in El Olivo we were accompanied by the juez (justice of the peace). In either case the guide introduced us in Otomi, set the family at ease and explained why we had come. Then, if necessary, as it generally was for women interviewees, he would act as interpreter for the interview.

We explained to each family that we were making a study of what people ate in El Espiritu. We then asked the following either in Spanish or in Otomi:

1) How many people do you have in your family? How many people eat here each day?

Total numbers given were divided into adults and children. Nursing babies were included in the number since every family had one. All unmarried offspring in a household were counted as children.

2) What occupations does your household have?

Because we were interested in comparing the effects of affluence (or relative affluence) on diet, we kept a record of a family's major sources of income (as jornalero, ayatero, maestro[3], occasional trips to Mexico City, etc.). We recognize that every family has multiple sources of income but to investigate this thoroughly would be a research project by itself.

3) How much land do you have? How many hectares does it contain?

Because we were interested in comparative affluence, we felt that landholdings would be a fair indicator of a family's relative prosperity.

4) Do you have your own pulque or do you have to buy your pulque (or do you not drink it)?

The amount of pulque consumed was not asked as this is a sensitive topic and it is difficult to obtain accurate information. We were more interested in whether a family drank pulque or not and whether they had their own pulque (indicating sufficient magueys and enough "good" land) or whether they had to buy their pulque from their neighbors (indicating few magueys and "bad" land, i.e. monte). This again is another gauge of relative wealth. In the case of El Olivo it also determined who did not drink pulque.

5) What religion are you?

We asked this question in El Olivo only as all El Espirituenos are Catholics or nominally Catholic. We were interested here in seeing whether there was a correlation between large landholdings, better education and occupation, and Protestantism.

6) a. Do you bring your food from the Plaza on Monday?

The answer was invariably yes.

b. We would like to know if you use these foods and if you do, how much you buy every week.

We then asked our food list. We were very careful not to put the item questions in a manner that demanded a yes answer; we did not ask "do you use coffee?" or "How much coffee do you use?" but "Do you use coffee or not?"

If a family answered "yes" to every item put before them or answered in exaggerated amounts, we discounted their survey. We noted all responses including all those indicating an occasional use of the item as opposed to weekly or daily use. We also noted comments made on food items - for example "Do you use pasote or not?", "Yes, to toss in with the beans". Finally, we made a superficial market price survey on July 26 in Ixmilquilpan so that standard weight/ number conversions could be made for comparative purposes.

In specific terms, the purpose of this survey was to determine what food was regularly consumed, what kind of consumption patterns existed in the village of El Espiritu and how El Espiritu compared in food consumption with El Olivo; that is, how affluence affects the diets of the Otomi.

We had assumed that to all our questions (on land holdings, occupation, diet, etc.) the El Oliveño's responses would indicate the higher level of affluence as compared to El Espiritu. Unexpectedly, our survey also revealed that El Espiritu contains several degrees of affluence which are geographically delineated. Instead of the real dichotomy we had anticipated between El Espiritu and El Olivo, we had what could be called a map of levels of affluence and a study of a diet which had the appearance of "evolving."

As we surveyed El Espiritu we were made increasingly aware that those people who have not colonized (those living Afuera) have a less varied and more basic diet and are less affluent than those in Centro. The people along the carretera seemed to generally be in a middle position.

We then divided our study of El Espiritu into its component geographical sections. The results of this study, then, are not merely a comparison of El Espiritu and El Olivo but of four degrees of affluence and their component attributes. Our survey includes 63% of the families in El Espiritu (Centro - 69%, Carretera - 78%, Afuera - 54%). According to the town's representative, El Olivo has around 30 families and our sample includes 22 of these. In all we interviewed 73 families.

Survey Results

Question 1 - How many people eat at your house every day?

Afuera	43 adults	62 children	20 houses
per house	2.15	3.1	5.25 people
Carretera	15 adults	25 children	7 houses
per house	2.14	3.57	5.71 people
Centro	49 adults	87 children	24 houses
per house	2.04	3.63	5.67 people
El Olivo	51 adults	106 children	22 houses
per house	2.32	4.8	7.12 people

The number of children per house increases from 3.1 Afuera to 4.8 in El Olivo. Possibly this is a result of a better diet (less infant and child mortality.) The average number of adults per household is more than two because of the occasional presence of a widowed relative.

Question 2 - What occupations do you have in your household?

El Espiritu is very dry and rocky with little rainfall and no possibility of irrigation; the three wells were sunk as much as 80 meters to hit the water level. Daily routine includes carrying firewood back from the hills, carrying water, pasturing the family's goats, taking the aguamiel from their magueys three times a day, grinding corn for tortillas, fixing meals, separating the fibers (ixtle) from pencas (blades) of magueys, spinning the ixtle and weaving it into ayates, clearing fields of cactus and mesquite, picking tunas for market during summer, washing clothes, building houses, etc.

The family is able to convert some of these chores into income by selling ayates, tunas, pulque and an occasional goat in the market. Other income derives from working as a jornalero (day laborer) in a neighbor's field, traveling to Mexico to work as a peon or as an assistant albañil (housebuilder). Education is often difficult for a family to provide for its children any further than the first six grades, but some students work as a promotor bilingüe (teacher's assistant) while studying to be a maestro. With a small amount of capital, one can run a store.

We found that the people Afuera are more dependent on day labor than those of Carretera or Centro. More people in the Centro supplement their incomes with occasional or regular work in Mexico (over half of Centro respondents as opposed to 1/3 Afuera). The three tiendas are in the centro as well as most of the town's pulqueros (pulque vendors). While all but two people in El Espiritu do day work as well as care for their own fields, half of the men in El Olivo consider themselves agricultores (farmers) rather than jornaleros. There are five householders in our sample of El Olivo who are teachers and one store owner.

Another significant aspect of a family's prosperity is the occupation of its children. In El Olivo there are 16 teachers and five promotores bilingües, sons and daughters not only of the teachers but also of the simpler farmers. In El Espiritu there are as yet no teachers; however, there are children in training in Ixmilquilpan and some nine promotores bilingües.

Question 3 - How many plots of land do you have? How many hectares do they contain?

Often we were not told how much land but only how many plots so that all our data was not computable. An additional complication is that we could not discover how many cuartillos there are in a hectare. Early (1969) says that the ratio is 10:1 but some people in El Espiritu calculated 5:1. We have left cuartillos as cuartillos; in any case, the relative landholding can be seen.

Afuera		
12 houses	6 hectarias	26 cuartillos
per house	1/2	2.2
Carretera		
3 houses	4 hectarias	6 cuartillos
per house	1.3	2

Centro		
8 houses	14-1/2 hectarias	15 cuartillos
per house	1.8	1.9
El Olivo		
21 houses	49 hectarias	3 cuartillos
per house	2.5	.14

The progression seems evident; people have more land in El Olivo and less in Afuera, with Centro and Carretera in between. While the amount of land is a significant measure of wealth, it can be misleading. A family with 5 cuartillos of good land will be better off than a family with 5 cuartillos of monte (uncleared hilly land). Therefore the next question, whether or not the family has its own pulque or must buy it, complements this information.

Question 4 - Do you have your pulque or do you have to buy your pulque?

Afuera			
18 houses	4 have 22% have	11 buy	3 have a little and buy the rest
Carretera			
7 houses	2 have 29% have	4 buy	1 other source
Centro			
24 houses	10 have 42% have	3 buy	1 other source
El Olivo			
14 houses	6 have & drink 65% have	3 have & don't drink	5 buy

Having pulque is indicative of having good and sufficient land. It also implies that the family has a source of income, for those families who buy pulque buy it from their more fortunate neighbors. Those families with surplus pulque can sell it in Ixmiquilpan. The ratio of families with pulque increases from Afuera to El Olivo.

Question 5 - What religion do you profess?

Out of our sample in El Olivo there were eight evangelists and fourteen Catholics. Our sample was broken down as follows:

Evangelists	Catholics
2 hectarias average land holding	2.64 hectarias average land holding
Teachers: 3	Teachers: 2
	Store: 1
Children	
Teachers: 9	Teachers: 8
Promotores bilingües: 1	Promotores bilingües: 4

It appears the Catholics have more land while the Protestants have more education. This could be indicative of the hindering effects of the Catholic mayordomia system. However, the fact that there are Catholic teachers is also proof that the mayordomias did not prevent anyone from becoming educated.

Question 6 - Diet survey

Based on data collected in Afuera, Carretera, Centro and El Olivo, there seems to be a continuum of affluence: landholdings, the number of families who have

sufficient or surplus pulque, the variety of jobs and number of salaried positions, and the number of people in the household all increase from Afuera to El Olivo. This proposition of relative affluence is reflected in the diet survey.

The Survey data have been broken down into the four geographic areas. Charts and tables made of these show[4]: 1) the seasonal availability of an item, 2) the measure in which the food item is given, 3) the price-weight or number conversion, 4) the percentage of families in each geographical area who regularly (weekly) consume/buy this item, 5) the average amount of this item consumed by families in each area, 6) the percentage of families who buy it "a veces", that is, not every week, 7) the percentage who never use it.

It is difficult to assess precisely the data from the diet survey. When a family indicated "a veces" to an item it could mean "when we have enough money", "when the item is available" (e.g. mangoes, calabasas), or "we buy it for a special occasion." "A veces" may also mean an item such as chile seco is bought in a quantity sufficient for several weeks (as indicated by the amount of money spent). Seasonal foods such as mangoes or calabasas obviously cannot be used every week. These factors must be taken into consideration when evaluating the survey. Perhaps a more important consideration would be the number of families in each area who never buy an item.

Figures for the Carretera are high, partly because one family consistently gave very high figures. Because the sample was small, the average was severely affected.

The first thing that is obvious from the information is the variety of foods consumed by Espirituenos - and this list does not include foods hunted or gathered in the campo (fields). Since this survey was done during the summer items specific to other seasons did not appear. Also, some fruits and vegetables available in the market were not investigated, for while they, too, are consumed occasionally, they are not regular components of the diet (e.g. apples, pomegranates, grapes, carrots, peas, several varieties of chile and beans). Their inclusion would have made the survey too lengthy and cumbersome.

In comparison to the bare diet described by Boyd, (1969) we found a wide spectrum of foods which are regularly or occasionally consumed in El Espiritu. Some reasons for the differences are 1) omission of some basic items by Boyd, e.g. salt, oil, lard; 2) possibly less affluence in Naxthey (Boyd's community), although house construction in Naxthey seems to be about the same as Afuera in Espiritu); 3) the tendency of Otomi to understate information which might relate to their wealth. People in El Espiritu sometimes claimed to eat no meat, but served us a piece of meat when we happened to drop in on market day. We feel a comparison between El Espiritu and Naxthey would have been profitable had Boyd used the technique of asking food questions off of a list of all possible items. Furthermore, his survey is so long and cumbersome (58 main question groups broken down into many sub-groups) that any informant would answer his open ended questions in the briefest possible way. Boyd mentions that eight to twelve men in his village were wage earners (a significant percentage); probably, their families had a much more varied diet than Boyd indicates yet he did not interview them or refer to their exclusion

when generalizing about dietary patterns in Naxthey.

Returning to our hypothesis of gradients of affluence, a superficial analysis of the data will reveal an overall pattern of increasing percentages of food item users from Afuera to El Olivo, with an accompanying increase in the amount of money spent of each item per week.

As prosperity increases, the number of people who eat eggs and meat increases: eggs are eaten on an average of 1.4 times a week by 60% of those Afuera, while over 90% of the El Oliveños eat eggs an average of 3 times a week. Eating eggs indicates that a family with chickens can afford to eat rather than sell its eggs. Some El Oliveños even reported buying eggs by the kilo. Meat increases from 25% weekly users in Afuera to 77% in El Olivo.

Refrescos (sodas): the amount of refrescos consumed in El Olivo is 14 per family per week by 70% of the families as opposed to 3 per family per week by 20% of the families Afuera. This reflects an expenditure on the part of the El Oliveños of $13.00 a week per soda drinking family.

Sugar, cinnamon, lemon, manzanillo (an herb), chocolate, and coffee: the quantity and number of users of these items increase from Afuera to El Olivo as more families can afford to provide their children, and themselves, with other than pulque to drink.

Bread, is another item which increases greatly with affluence in terms of numbers of users and amount spent: 75% of those Afuera spend an average of $1.25 a week on bread, 95% of El Oliveños spend an average of $6.24 a week.

Oil and lard: more families use oil in the Centro and in El Olivo (and spend more on the average) than Afuera. The highest amount of lard users is in the Centro. This is due to an overlapping of oil and lard use (families in the Centro who use both).

Spices: spices are sold in small quantities - 20¢ will be about a week's supply - however, some families buy in larger quantities "a veces." The survey indicates that more affluent families use a wider variety of spices, though they spend less on each item (probably due to the variety).

While staples such as corn, rice, frijoles (beans), chile verde, tomates (green tomatoes), jitomates (tomatoes) and onions, show almost the same amount of users, the amount of money spent on each item increases slightly from Afuera to El Olivo.

Hongo de Maiz (corn fungus), Flores de Calabasa (squash flowers), figs, and peaches, items which are available in the milpas, have a higher percentage of consumers in Afuera. Informants in Afuera indicated that they did not buy but rather gathered these foods. Perhaps a study of gathered, rather than purchased, food would show an overall high for Afuera.

Fruit: fruit is generally seasonal, and while some families indicated affirmatively to weekly use of many fruits, they do not buy all these fruits every week. Fluctuating prices determine where the family's extra pesos will be spent. Except for bananas, which are available year round at a fairly stable price, fruits are usually bought "on special."

Pineapples will illustrate. One week pineapples will arrive in a huge lot at the market. Early prices reach $2.00 (pesos) each, but by afternoon the price will have dropped to $1.00 or even to 80¢. Hawkers push through the crowds with

handfuls of pineapples. Otomis generally buy pineapples when the price is low, usually after all their staple shopping is done. Sitting on the roadside, waiting for the bus, or even on the bus, they are prey to hawkers who cajole them by placing the fragrant pineapple on their laps. After a hot tiring day at the market a cheap pineapple is hard to resist.

Our charts indicate oranges, pineapples, bananas increase from Afuera to El Olivo in terms of percentage of consumers as well as amount spent. Other fruit - mango, watermelon, and melon, all less popular fruits - increase in pesos spent from Afuera to El Olivo. However, there appears to be a larger percentage of consumers in Centro.

Cheese: the use of cheese is very limited, usually "a veces"; however, again El Olivo is the biggest consumer.

Milk: our survey indicates 23% of El Oliveños drink milk regularly, spending on an average of $11.60 a week.

From this breakdown it is apparent that, as affluence increases more foods are included in a family's diet. Affluence brings an expansion of the diet rather than a change of diet, that is, new foods are not substituted for others, but included in an expanded diet. Families, then, continue to eat tortillas as well as bread; staples remain more or less at a constant, though the amount spent on each item may increase.

As prosperity increases the use of sugar, refrescos, coffee, bread, spices and some fruit in general increases; meat is eaten more often and eggs from a family's chickens are consumed by that family rather than sold.

What the addition of these new food items or their increased usage will mean to the health of the Otomi is not known at this time. Already, however, the traditionally beautiful teeth of Native Americans, apparent even in the very old people, now evidence cavities in El Olivo, possibly as a result of the large sugar intake averaging 2.5 kilos per week per family.

Our original purpose to compare the traditional diet to one affected by prosperity seems to have been impossible, for in El Espiritu, even Afuera, the people are not eating a traditional diet. Perhaps the study done by Boyd could be considered as a more traditional diet, one against which the four areas of El Espiritu could be compared.

Our suspicions about the evolving diet of El Espiritu seemed to be confirmed when a very articulate young woman from the Centro of Espiritu, on seeing our completed survey data, said: "These data that you collected will have increased even more by next year. Each year the diet changes and there are more things that the people eat".

We asked: "What do the people eat now which they didn't eat before?" Answers indicated the use or consumption of more meat, coffee, oil instead of lard, eggs (those who have chickens). The children used to drink only pulque; now they drink agua de limon (lemonade), sugar water, or coffee. Before people ate "pura salsa" (nothing but chile sauce). We should note that the increase she described is demonstrated in the progression from Afuera to El Olivo.

Conclusions

Diet

1) The diet is no longer traditional even in the least economically advanced area of El Espiritu. Already the diet includes items not considered traditional, items which may not have been available a few years ago.

2) The Otomi diet expands rather than changes with prosperity. As a family's lot improves economically, more food items will be included in the diet; however, the staples will remain a large part of the diet with even more money being spent on their use.

Prosperity

We have several hypotheses concerning the rise of the economic level of the Otomi of El Espiritu and El Olivo.

1) The road. The road was built only recently (about 1958) connecting El Espiritu and El Olivo with the main road to Ixmiquilpan. Previously people had to carry their goods to market (14 km.) on their backs. Now goods can more easily be transported to an from market.

2) Irrigation. The rise of the economic level of the rest of the state of Hidalgo due to irrigation has also brought an increase in the price of pulque, for those lands now being irrigated are no longer planted in magueys. Therefore, there is a rise in demand for, as well as in the price of, pulque. Otomis who previously had a bare subsistence now have a "cash crop" they can sell in town.

3) Participation in the money economy. As especially reflected in El Olivo, magueys are assets! they provide a means of supporting one's children while they are being educated. When children do receive an education, they can get salaried positions, for example, as teachers, and thus contribute to a family's prosperity.

El Olivo has had more magueys than El Espiritu since 1910. Therefore there has been more money and more educated children, and therefore more advancement than in El Espiritu as a whole. The Centro of El Espiritu reflects this pattern when compared to Afuera! more land, more magueys, more money for education, and subsequently a more expanded diet. Why people in the Centro have more land is not known. Possibly those with more land and money were better able to colonize.

4) Religion. In the case of El Olivo, Protestantism did not seem to be the determining factor in a family's prosperity. Our survey indicated that Catholicism <u>may</u> have hindered Catholics in educating their children. However, both Catholics and Evangelists have large holdings, educated children and pulque; and, on the other hand, there are in El Olivo both Catholics and Evangelists who have no land or little land, no educated children nor pulque.

5) Education and religion. In the 1920's El Olivenos were attending the Internado Indigena, a government boarding school established to provide education for Otomis living in villages without schools. Parents paid a small fee. Protestantism came to El Olivo in 1952, so Protestantism could not have been the determining factor in the education of these children.

Pulque, which is not consumed by Evangelists, is also not consumed by educated Catholics. However, the parents of these educated Catholics <u>do</u> drink pulque. Thus, sobriety could not be the reason for El Olivo's prosperity, for pulque drinkers

are equally prosperous.

The mayordomias were ended in El Espiritu and El Olivo in 1965. While this burden levied on Catholics may have hindered them, it did not prevent these Catholics from achieving prosperity, e.g., educated, middle-aged Catholics with large landholdings in El Olivo. Possibly it will be easier now for Espiritenos to educate their young.

5) Land. The largest factor determining the prosperity of a family, we feel, is not its religious affiliation but primarily the ownership of land. The larger amount of good land a family owns, the more pulque and tunas it will have to sell, the more money available to educate its children and in return secure a salaried income for the household. This prosperity is reflected in the expanded diet.

Notes

1. The faena sheet is a list composed of all males over 18 years of age. In lieu of paying taxes, Otomi villagers work one day a week for their town. The faena sheet is a schedule of assigned work days and a record of a man's attendance. Those who fail to perform their duty are fined. Those families with no male head (i.e. a widow's family composed of minors) are not listed on the faena sheet; there are at least four such families in Espiritu.

2. In the last 11 years, only three corn crops have come in because of the extreme lack of water.

3. Jornalero - one who does not do the same work every day; i.e. he works his own fields some days, on others he helps his neighbors, and on still others he may make something for sale or take produce or goods to market to sell.
Ayatero - one who spins ixtle (maguey fibers) and weaves them into ayates (a coarse cloth) as his primary means of livelihood.
Maestro - schoolteacher.

4. For the sake of brevity, charts and tables (except Table 1) are not reproduced here.

TABLE I

Store Inventories

El Olivo	El Espiritu*
Canned milk	Beer
Sodas	Sodas
Noodles, Lentils	Noodles
Sugar	Sugar
Candies	Candies
Cookies	Cookies
Oil	Oil
Salt	Salt
Bread, Rolls	Bread, Rolls
Corn Meal	Corn
Rice Meal	Rice Meal
Rice	Rice
Coffee, Instant Coffee	Coffee
Eggs (7 flats)	Eggs (basket)
Sardines in cans	Sardines in cans
Dried Chiles	Mescal
Cello bags of Chile Powder	Tomatoes
Raw sugar	Cinammon
Chiles in cans	Raw Sugar
Chewing Gum	Chiles in Cans
Consumé	Chewing Gum
Gelatins	Popcorn

TABLE I: CONTINUED

Store Inventories

El Olivo	El Espiritu*
Soaps	Soaps
Light Bulbs	Light Bulbs
Matches	Matches
Candles	Candles (votive and tapers)
"Asperil Tabletas"	"Ete"
Hair Pins	Wax
"Mejoral"	"Mejoral"
"Alka Seltzer"	"Alka Seltzer"
Batteries	Batteries
Canned Fruit Juice	Chocolate
Cello Bags of Nuts	Band aids
Chocolate (several types)	Razor Blades
Band aids	Pencils
Balloons	Ball Point Pens
Ball Point Pens	Cigarettes
Pencils	
Erasers	
Note Books	
Dried Spices	
Marshmallows	
Cigarettes	

* There are three stores in Espiritu. For comparative purposes, we selected the largest.

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A COMPONENTIAL ANALYSIS OF THE OTOMI ANIMAL DOMAIN

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Este trabajo intenta una explicación estructural del dominio lexigrafico animal de los Indios Otomi que habitan en el valle del Mezquital en Hidalgo, Mexico. De este análisis se desprende la estructura del espacio semantico. El metodo para descubrir la estructura semantica es la formulación de preguntas y respuestas de parte de los informantes nativos.

La estructura revelada fue una taxonomia superficial que contenia relaciones jeráquicas. Las contrucciones mas elaboradas fueron encontradas sub-leximicamente en los componentes de significado. Estas construcciones estan ilustradas en los paradigmas.

El resultado teórico mas sobresaliente para etnografia y linguística es que la estructura del espacio semantico no es estatica. Por el contrario, los rasgos de significado oscilan a lo largo de una linea continua donde cada clasificación animal depende del contexto, del tiempo y del actor.

This paper presents a componential analysis of the animal domain of the Otomi Indians of the Mesquital Valley of Hidalgo, Mexico. I will discuss (I) my theoretical orientation in the paper (II) the environmental setting for research (III) the methods of data acquisition (IV) analysis of the results including a taxonomy and tree and paradigmatic structuring of the major categories (V) ethnographic considerations and (VI) concluding remarks.

I. Theoretical Orientation

> "The necessity for aggregating things into classes is a completely general characteristic of living things. The most basic postulate of science is that nature itself is orderly." (Simpson 1961)

The basic assumption of ethnoscience is that man orders the innumerable perceptions he receives into a workable set of concepts. Cultures differentially weight and select perceptions in the formation of concepts. These concepts, whether labeled or unlabeled, form the cognitive spaces for that culture. It is the transition from the unstructured semantic strata (etic grid) to the culturally structured sememic strata (emic grid) which is the goal of componential analysis (Lamb 1964). Language is taken as a legitimate point of departure for the study of the structure of cognitive space even though the form of a language is not always congruent with the form of meaning. The assumption is made that to the degree there is communication through language within a population, there will be a shared code. It is the elucidation of this shared code which I am attempting. This presentation makes no claim as to the psychological validity of the structure discovered but does hold that there is structural validity. One is provided with the rules for producing culturally appropriate categorizations of objects.

II. Environmental Setting

Research was conducted in the summer of 1971 in Nequeteje, a small settlement of Otomi-speaking Indians, approximately ten kilometers from the market town of Ixmiquilpan in the state of Hidalgo. Since my investigation focused on the animal domain, it is relevant to outline the importance of animals in the economy. Another salient factor to be considered when studying taxonomic groupings and the variations in them, is the degree of acculturation demonstrated behaviorally in education, language, economy and land use patterns. It is my contention that variations in taxonomies can be correlated with degrees of acculturation into the wider Mexican mestizo culture and Spanish language. Here I will briefly describe the community and mention degrees of acculturation.

The community of 90 homes maintains the traditional dispersed settlement pattern, despite government efforts to nucleate the community. The families are scattered almost evenly throughout the approximately 3 square kilometers of scrub desert. This pattern is maintained in order to gain maximal access to the three types of land. Land may be cultivable or it may be pasturage allowing for grazing as well as hunting and gathering; land may also be barren. Animals are grazed on one's own land not on communal land. The land types are scattered randomly. There are no large tracts of land which are appropriate for one type of use. For the above reasons the Otomies believe it is best to live in a dispersed pattern. Plants which are cultivated can be watched and protected from harmful animals and people. Fruits and grasses which are gathered especially in the summer are close by and not liable to be gathered by neighbors. Animals can pasture nearby in case the shepherd is needed during the day. Animals are less likely to bother the neighbors' plants.

Lack of integration into the wider economy makes these people classical peasants. Nequeteje has no irrigation. The major crops are the century plant which provides them with a fermented sap drink and the prickly pear which is their only seasonal cash crop. Corn and beans are planted by some but the harvest is never enough to support a family for more than a month or two. The family income is primarily secured from the sale of carrying cloths or palm mats, both of which are woven in the community. If there is an emergency, the living bank account (domestic animals) can be tapped. These domestic animals are raised for sale in the market but, in effect, they provide security for the family. Only once in my stay of six weeks was a goat killed and eaten by a "rich" man and his family. Occasionally a man or son will go to Mexico City and do unskilled construction work for a few months in order to replenish the family funds (Bernard 1969).

III. Methods of Data Acquisition

In this section I will present the specific techniques used in the field and discuss their effectiveness in this study and their value for anthropology. The assumption is that there is a discoverable structure in language. The techniques I used approximate the formal elicitation procedures of Metzger and Williams (1966) whose aim is to attain replicable data by collecting responses to controlled frames (or questions) which have been produced by native speakers. The resultant cultural

description will then be testable and replicable by other investigators. This method will give anthropology a base of verifiable data with which to work independent of further analytic procedures which may be applied to the data.

Step 1: The observation of behavior in an effort to identify a significant domain and its parameters.

Step 2: The selection of an informant or, more exactly, the discovery of someone who was willing and able to give time and information to me. Key informants are few and far between; most people are not able to give the time to an outsider. This problem may be more prominent in linguistic work than in other types of ethnographic work because, generally, more time is needed with a single informant. A second factor limiting selection of an informant was the fact that I wanted a literate person so that he would be able to perform sortings with cards. Because of the above mentioned demands, informants are often not selected by anthropologists but rather anthropologists are selected by informants. Fidencio, my informant, was a 66 year old man who had been born in the village, had worked and travelled many years outside of the community, and then returned at the age of 48 so that he could die in his homeland. Now, after eighteen years of continued illness, the man can no longer stand; he is always in his home, minding the children of his nephew, making palm mats, or just sitting watching the plants. As previously mentioned, the job of keeping an eye on the plants is an important one.

I had hoped to study the food domain but since I was unable to find a woman with whom I could work and since Fidencio was not interested in this domain, I chose another area for study. Informants not only may select the anthropologist, they may also select the topics of investigation. I decided that Fidencio would enjoy describing the animals living in the valley so that became my new domain for investigation.

Step 3: The elicitation of all the animal names in Spanish and Otomi which Fidencio knew. The list is limited to those animals which, according to Fidencio, live in the Mesquital Valley.

Step 4: The unstructured sorting of the 100 elicited animal names. I presented Fidencio with one hundred 3 x 5 cards each bearing an animal name. His job was then to sort the cards into two stacks. To convey the idea of this job without giving the informant a dimension of meaning for the domain was very difficult. Eventually Fidencio sorted the pack into two groups. Once the sorting was completed, he told me why one animal was placed in group One rather than in group Two. I continued with this type of unstructured sorting until Fidencio had made 3,5,7 and then 10 stacks of cards. From each sorting new dimensions of meaning were identified. I made tentative hypotheses as to the groupings and the significant features which defined these contrast sets.

Step 5: The elicitation of questions from Fidencio for the tentative groupings of animals identified in step 4. To convey the idea that I wanted to be given questions was perhaps the most difficult task. Yet, the solicitation of the significant questions is crucial to the theoretical and methodological assumptions of this paper. To know categories in a language without knowing the criterial attributes which distinguish them from each other is a first and necessary but

relatively sterile stage in the process of describing the structure of that language. The objective is to discover the linguistic environment to which such a category is an appropriate response.

Once a few core questions were identified in Otomi and Spanish I began to apply these to each of the animals. A sample question is; "How many kinds of X are there?" As Fidencio began to answer the questions other features of meaning were given. From these features he would formulate more relevant questions. In the end, approximately 20 questions were asked of each animal.[1]

Step 6: The discovery of superordinate categories. Inclusion relations between lexemes were obtained by asking, "Are both X and Y, Z's?" Often in the search for superordinate categories the answer received is, "X is X." A useful technique in discovering groupings with overt or covert labels is to present the informant with three animal names and ask him to select the two which are the most similar. The informant is then asked in what way they are similar. This yields features of meaning and may result in the discovery of groupings which the native speaker cannot verbalize.

I did not rely solely on my key informant for an understanding of how the groupings of animals relate to one another and to man. I sought the aid of other men in the village, children, and a teacher from outside the village. My aim was not the discovery of an individual cognitive map but one which was culturally valid and shared. I was seeking to determine the shared code which allows for understanding within a population. Because of individual differences in educational, economic, and ecological background, specific domains will be known in varying degrees by different members of a community. No one member can be expected to know all domains equally well. For these reasons I compared the data received from Fidencio with other members of the community.

IV. Analysis of Results

A. Taxonomy

The following diagram is the shallow taxonomy which resulted from the application of certain ethno-semantic techniques to the lexical domain of animal terms in Otomi. This taxonomy is a reflection of the strictly morphological characteristics which are observed and considered important. It is not congruent with the Linnaean system and one should not expect such a congruence. The Linnaean categorization of animals reflects the phylogenetic and morphological characteristics of animals. It is a system devised by scientists for their own specific purposes. Every population will group their animals in a way that is economically and ecologically significant to their situation (See Figure 1).

Figure 1. Taxonomy of Otomi Animal domain

Zu?we "animal"					
mbo?ni "mammal"	ʌni "fowl"	c?iic?ɨ "bird"	K?eñɔ "snake"	meše "spider"	zu?we "insect"

B. The Mbo?ni - Zu?we Continuum

It became clear while working within the six taxonomic groupings that the

components of meaning which distinguished the terminal taxa could be seen as features of one dimension of meaning - closeness to man. All animals can be placed along this continuum from mbo?ni (close to man) to zu?we (distant from man). Because of the importance of this dimension, I will present the features within this dimension before discussing the tree and paradigmatic structuring of the taxonomic groups.

The analysis of this dimension of meaning represents a functional scheme which is highly relevant to Otomi culture. The term functional is here used to designate the necessary conditions or pre-requisites for membership in the category mbo?ni or zu?we. In order for an animal to be mbo?ni it must function as an mbo?ni with respect to the environment, economy and man. Mbo?ni and zu?we, in contrast to the taxonomic categories, have no morphological requirements but rather behavioral pre-requisites. Although morphological conditions are neither necessary nor sufficient conditions for inclusion in the categories mbo?ni or zu?we the presence of certain morphological characteristics makes inclusion more or less likely. The Otomi have devised a means of variably encoding the biological nature and anthropocentric salience of animals into one cognitive space. The separation of the two perspectives will necessarily result in incomplete representation of the domain. One must discover how the Otomi mesh the two views into one complete ordered domain.

The components of meaning from mbo?ni to zu?we are differentially weighted. Number One includes the most important features while number Four includes the least important features.

	Mbo?ni 'close to man'	Zu?we 'distant from man'
1. Housing	lives near man	lives far away
	has a man-made home	has no home at all
2. Behavior	is fed by man	finds own food
	sleeps at night	wanders at night
	locomotion by walking	→ flying → crawling
	exhibits social organization	is always alone
3. Effects on man	economically beneficial	worthless
	harmless	poisonous - fatal
4. Observability	easily seen	difficult to see
	moves during the day	moves at night
	large enough to see	very small
	moves at a moderate speed	moves very fast

Each of the above components of meaning has a range and I have only stated the ends of the continuum. For a speaker to make a mbo?ni - zu?we designation, he must zero in on one or more of the distinguishing characteristics of 'closeness' as a result of situational factors and then make the mbo?ni-zu?we decision. The decision is made on the basis of that limited subset of the full set of 'closeness' features which he selects. Each categorization is only determinable in context. In order

to predict the use of the mbo?ni and zu?we categorization, one would have to have an understanding of the economy, ecology, and history of the culture as well as the sex, education and economic standing of the speaker. These areas suggest sources for the verification of the psychological validity of the structures discovered through componential analysis. I will comment on a few of these topics in section V.

The Otomi animal world is basically divisible into two groups - the mbo?ni and the zu?we. However, there emerges a middle ground which is neither close nor distant. The middle animals are the animals of the hunt. The resulting tripartite division (animals of 'the house,' 'the field,' and 'the distance') is reminiscent of Levi-Strauss' categorization (Levi-Strauss 1966). "The thesis is that we make binary distinctions and then mediate the distinction by creating an ambiguous intermediate category." (Leach 1964:45)... "we ... need a graduated scale close/far, more like me/less like me" (Leach 1964:62). The investigation of the universality of such structures could be the subject of future research but will not be treated here.

Figure 2 shows the continuum from mbo?ni to zu?we as it is meshed with or correlated to the taxonomic categories. Since any animal can be placed anywhere along the continuum dependent on its function and behavior this representation is to be understood as indicating where an animal would most likely fall for a man of average income from the community in which I studied.

Figure 2. Continuum of Otomi animal world

Mbo?ni					Zu?we		
House		Field			Distant		
mbo?ni "domestic mammal"	ʌni "domestic fowl"	mbo?ni "wild mammal"	ʌni "wild fowl"	c?iinc?ɨ "bird"	k?eñɔ "snake"	meše "spider"	zu?we "insect"

An example of how one animal might be categorized as zu?we in one instance and as mbo?ni in another demonstrates how flexible and context dependent this dimension of meaning is. A cat which is tripped over at night may be called zu?we while the same cat in the light of day as he eats bothersome insects may be called mbo?ni. An animal which has never been seen before is zu?we until one knows how to interact it. If the animal's behavior and function fall closer to the mbo?ni end of the scale it is then mbo?ni.

C. Tree and paradigmatic structuring

In this section I present the tree and paradigmatic structures discovered within the six groupings of the shallow taxonomy (See Figures 3 - 23). The mammals have been divided into the wild and domestic (which is the first divide) merely for ease in diagramming. As can be seen on inspection most of the features of meaning can be seen as components of the mbo?ni zu?we continuum. As one proceeds further from man morphologically there are fewer and fewer features that would, under natural conditions, place the animal in the mbo?ni category.[2]

Figure 3. Tree diagram of Otomi domestic animals

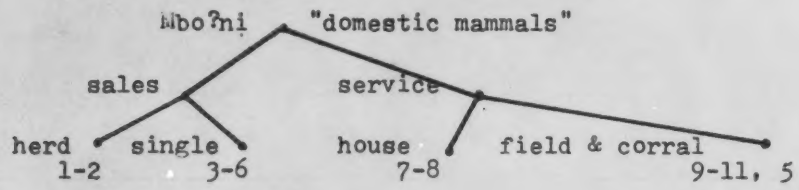

Figure 4. Value of domestic mammals in pesos

animal	Value in pesos	
1. goat	25-50	200
2. sheep	30-50	200-250
3. cow	1000	
4. steer	1000	
5. bull	1500	
6. pig	1000	
7. cat	exchanged	
8. dog	exchanged	
9. mule	500-1200	
10. horse	1000-2000	
11. donkey	200-700	

Figure 5. Componential analysis of domestic mammals

	1.	2.		3.	4.	5.		7.	8.
wool sheared	+	-	milked	+	-	-	house protector	-	+
			used in mating	+	-	+	mouse eater	+	-

	5.	9.	10.	11
strength	+	+	+	-
can reproduce	-	-	+	+
gives transportation	-	+	+	+

Figure 6. Tree diagram of Otomi wild mammals

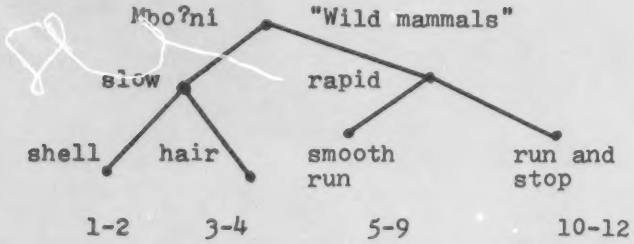

Figure 7. Componential analysis of wild mammals

	1. turtle	2. armadillo	3. opossum	4. skunk	5. coyote	6. deer	7. badger	8. wild cat	9. fox	10. rabbit	11. squirrel	12. hare
medicinal	-	-	-	-	+	-	-	-	-	-	-	+
edible	+	+	+	+	-	+	+	+	+	+	+	+
hunted with gun	+	+	-	-	-	+	-	+	+	+	+	+
enters water	+	-	-	-	-	-	-	-	-	-	-	-
gives milk	-	-	-	+	+	+	+	+	+	+	+	+
has hair	-	-	+	+	+	+	+	+	+	+	+	+

Figure 8. Componential analysis of wild mammals

	7. badger	8. wild cat	9. fox
carnivore	-	+	+
barks	-	-	+
will attack man	-	+	-
color	brown yellow	grey	brown yellow

Figure 9. Componential analysis of wild mammals

	10. rabbit	11. squirrel	12. hare
*size of dog	-	-	+
long bushy tail	-	+	-
value in poses	10	0	15

* approximates the size of a small dog. The size of an animal is thought of in relation to that of a small dog (i.e. 30 in. long and 20-25 in. high). This is the size of most of the dogs in the area.

Figure 10. Tree diagram of Otomi fowl

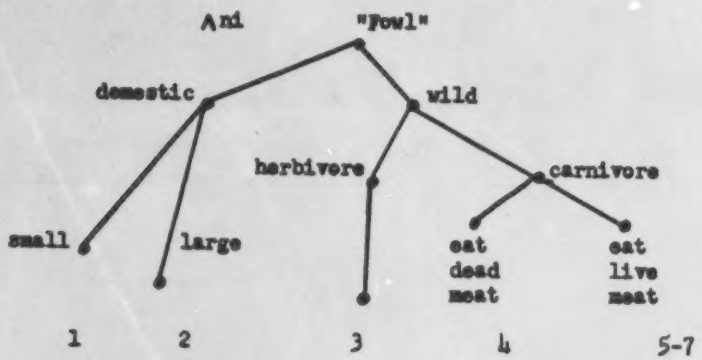

Figure 11. Componential analysis of fowl

	1. chicken	2. turkey	3. crow	4. turkey buzzard	5. road-runner	6. sparrow hawk	7. owl
value in pesos	20-25	80	0	0	3	10	0
medicinal	-	-	+	+	+	-	-
edible	+	+	+	-	+	+	-
sold	+	+	-	-	+	+	-
* speaks Otomi	-	-	+	-	+	-	+
* speaks Spanish	+	+	-	-	-	-	-
night	-	-	-	-	-	-	+
flies	-	-	+	+	+	+	+

* The sounds made by animals are heard as Otomi words, Spanish words or as nonsense syllables. The people know that the animal is not really speaking.

Figure 12. Tree diagram of Otomi bird domain

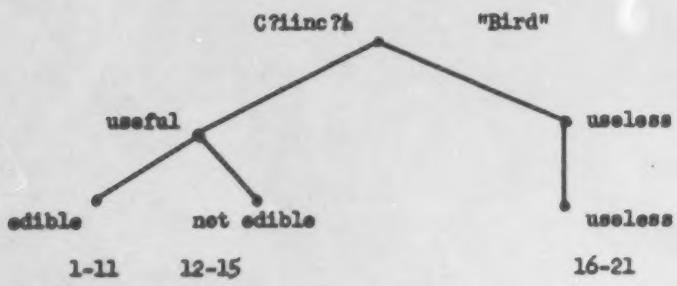

Figure 13. Componential analysis of Otomi bird domain

color	value in pesos	carnivorous	larger than baby chick	has nest	sings		
white, black	0	-	+	+	+	1.	mourning bride
black and white	10	-	+	+	+	2.	quail
gray, white	3	-	+	+	+	3.	pigeon dove
black, white speckled	0	+	-	+	+	4.	pajare vieja
black	2	+	-	+	-	5.	pilate
red, gray	1	-	-	+	-	6.	nightingale
gray, white	50-100	+	+	+	+	7.	mocking bird
gray	3	+	+	+	+	8.	uitlache
gray	1	+	+	+	-	9.	sorrilla
black, white	1.50	+	-	+	+	10.	ground dove
gray, white	1.00	-	+	+	+	11.	pigeon
red	15.00	+	-	+	+	12.	cardinal
yellow	5	+	-	+	+	13.	lark
ash, red head	2.50	+	-	+	+	14.	sparrow
gray	0	+	-	+	-	15.	golondrina
white	0	+	-	+	-	16.	verdugillo
gray	0	+	-	+	-	17.	grebe
black, green	0	+	-	+	-	18.	humming bird
red	0	+	-	+	+	19.	tutuvilin
black, white, red or yellow head	0	+	-	-	-	20.	woodpecker
black	0	+	-	+	-	21.	thrush

Figure 14. Tree diagram of Otomi snake domain

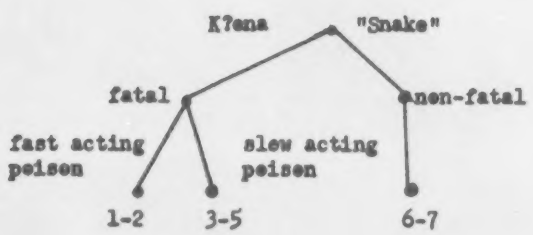

Figure 15. Componential analysis of Otomi snake domain

	1. rattlesnake	2. coral snake	3. viborea	4. copperhead	5. western moccasin	6. limcer	7. vibora del aire
length 1m.	+	-	+	+	+	+	-
width 10cm.	+	-	+	+	+	-	+
moves fast	+	+	+	+	+	-	+
fears water	+	+	+	+	+	-	+
useful	+	-	-	+	+	-	-
color	black and yellow checked	yellow, red and black head	black	yellow checked	yellow and black checked	red	black and green striped

Figure 16. Tree diagram of Otomi spider domain

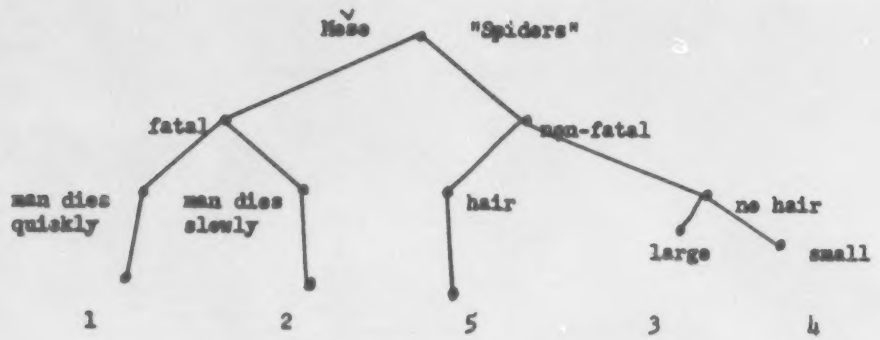

Figure 17. Componential analysis of Otomi spider domain

	1. black widow	2. capulina	3. araña de tañgra	4. araña blanca	5. tarantula
body 5cm.	+	-	-	-	+
legs 5cm.	-	-	+	+	-
color	black	black	black	white	black

Figure 18. Tree diagram of Otomi insect domain

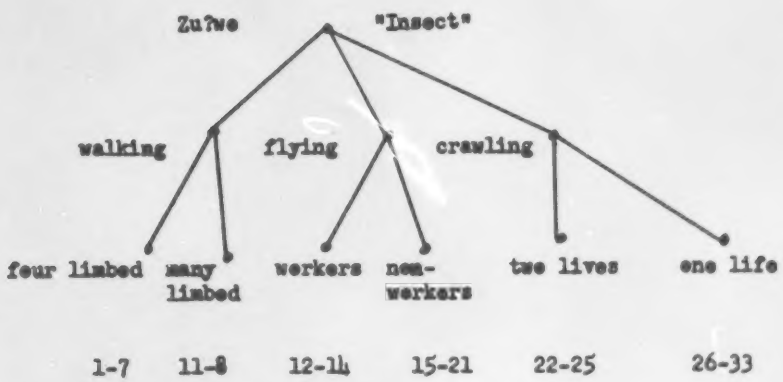

Figure 19. Componential analysis of Otomi insect domain

young born	saleable	parasitic	night	harmful	edible	
+	-	-	+	-	+	1. large rat
+	-	-	+	+	-	2. mouse
+	-	-	+	+	-	3. ounce
-	-	-	-	-	+	4. teshine
-	-	-	+	+	-	5. toad
-	-	-	-	+	+	6. frog
+	-	-	+	-	-	7. bat
-	-	-	+	+	-	8. centipede
-	-	-	+	+	-	9. scorpion alacran
-	-	-	+	+	-	10. scorpion escorpien
-	-	-	-	-	-	11. lizard
-	+	-	-	+	-	12. bee
-	-	-	-	+	-	13. hornet
-	-	-	-	+	-	14. wasp (jicote)
-	-	-	-	-	-	15. butterfly
-	-	-	-	-	-	16. grasshopper
-	-	-	-	-	-	17. cricket
-	-	-	-	+	-	18. wasp (abispa)
-	-	±	-	-	-	19. fly
-	-	-	-	-	-	20. Mexican beetle
-	-	+	o	+	-	21. mesquite
-	+	+	o	-	+	22. harvest fly (chichara)
-	-	+	o	+	+	23. gusano de mesquite
-	-	+	o	+	+	24. gusano de nopal
-	-	-	-	-	-	25. gallina ciega
-	-	+	+	+	-	26. flea
-	-	+	+	+	-	27. louse
-	-	†	-	+	-	28. beetle (pinakate)
-	+	+	o	-	+	29. chimiquile
-	-	+	-	-	-	30. snail
-	-	-	-	+	-	31. red ant
-	-	-	-	+	-	32. black ant
-	-	†	-	+	-	33. earthworm

Figure 20. Componential analysis of Otomi insect domain continued

	length	fatal	poisonous		
15.	cm.	-	+	8.	centipede
12	cm.	-	-	9.	scorpion alacran
25	cm.	+	+	10.	scorpion escorpion

Figure 21. Componential analysis of Otomi insect domain continued

size	4 cm. fat	12. bee	
	4 cm. thin	13. hornet	
	3 cm. fat	14. wasp (jicote)	
home	in trunk		
	in branches		
	in ground		

Figure 22. Componential analysis of Otomi insect domains continued

	butterfly	grasshopper	cricket
bread wings	+	-	-
grounded halting flight	-	+	-
length	10 cm.	5 cm.	3 cm.

Figure 23. Componential analysis of Otomi insect domains continued

		26. flea	27. louse
home	man & animals	+	-
	on man	-	+

Figure 24. Pre-Conquest Otomi animal domain

Zu?we			
covert category "dog, turkey"	mbo?ni "game"		su?we "small distant animals"
covert category	mbo?ni "mammal"	c?iinc "bird"	su?we

V. Ethnographic Considerations

Faced with diversity in the taxonomic categorization and the distinctive features of the animals, I hypothesize explanations for these variations by drawing on historical, ecological, economic, educational and sexual ethnographic data. Language must be seen as part of the integral cultural whole.

The Otomi language is in a state of change phonologically (Bernard 1969:97) and, I assert, semantically. I propose a historical explanation for the unparsimonious division of the six taxonomic groupings into eight when the functional dimension of mbo?ni-zu?we dimension of meaning is applied.

In pre-Conquest times I suggest that there were three groups of animals: the house, the hunted and the distant animals. Since the house animals were limited to the turkey and the dog (Carrasco 1950), this category was covert (See Figure 24). Under Spanish influence (both culturally and economically) the language and its cognitive spaces began to change. Both the ʌni and the mbo?ni groups changed their distinctive features in order to coincide with Spanish language and culture. ʌni previously referred to the flightless bird of the house which gave eggs and provided meat, then became glossed as the Spanish ave or fowl and thereby included all large birds, domestic and wild. The birds of the field which had included all wild winged animals could now not include the wild fowl. The Otomi c?iinc?i was diminished while the larger category of field animals was given one more group, the wild ʌni. With the introduction of domesticated animals by the Spanish the Otomi category of mbo?ni was divided into the wild and domestic (or house) mbo?ni. The new animals, the pig, horse, cow, sheep and goat were treated as house animals but morphologically should be in the field group. Perhaps it is for this reason that the features of mbo?ni vary so wildly. As can be seen, only the distant category, which was (and is) unimportant to the Spanish, has remained untouched.

One may seek to explain variations in the categorizations of animals as the taxonomy and the mbo?ni-zu?we continuum are meshed by describing the place the animal occupies in the environment physically and thermodynamically. Animals may change their position along the continuum as their contribution to the energy flow of a community comes closer to man. An interesting manner of testing this hypothesis would be to diagram the energy flow of a community on the model presented by Odum (Odum 1971). According to this hypothesis, as an animal began contributing more directly to man's food or energy intake it would become more likely to be mbo?ni. The test of this theory could be done synchronically or diachronically.

Variations in the categorization are also a reflection of the degree of acculturation and education. An educated man gave me a taxonomy based on morphology and did not emphasise the features which would allow placement on the mbo?ni-zu?we continuum. The relevant features for a hunter and for a teacher would result in different grouping of the terminal taxa.

One last ethnographic point on which I have very little data is the sex variable in taxonomic categorization. Women and children are responsible for the pasturing of the animals and the feeding of the chickens, pigs and turkeys. One of the women who was able to speak Spanish rather well was able to tell me of the various illnesses of the turkeys and chickens, what kind of medicine to give and which

animals were the stronger. The goats were known intimately and some had names and their personalities were known. Such detailed information would result in differing features of meaning certainly on the lower levels and perhaps on the higher levels. The study of this variation would probably provide valuable data not only on the semantic structure but also on the view and place of women in Otomi culture and society. Unfortunately the data presented in this report reflects only a man's view of the world.

VI. Concluding Remarks

Two important caveats for future investigators emerge from methodological considerations. The first is that when studying ethno-semantics one should not rely on an intermediary "contact" language. Secondly, when studying the animals of an area one should collect specimens or at least go and observe each named animal in its natural habitat.

Initial questioning about the animals was done using both Otomi and Spanish terms. Answers were noted in both languages. As Fidencio had difficulty understanding my Otomi terms, the questions and answers were soon completed in Spanish with only the animal name in Otomi. I assumed that my informant was fully bilingual. This judgment proved to be incorrect. He was glossing Otomi categories into the nearest Spanish category which he knew. Furthermore, he and I understood the Spanish lexemes within our own cognitive spaces, which were not identical and which were, in addition, probably not the cognitive space of a native Spanish speaker. To illustrate this point, Fidencio categorized a land lizard in the class of worms (gusanos) yet, he was not referring to any Spanish category but rather to an Otomi group which he had glossed as the Spanish (gusano) worm. Not only were the segregates in the animal domain a source of confusion but also the dimensions of meaning within contrast sets were glosses from Otomi categories. The definition of poisonous ranged from 'irritating' to 'that which caused death unless attended to by a doctor.' The limitations of contact languages must be realized when working in ethnosemantics.

The second warning is to collect or observe carefully the animals one is studying. One should not rely on verbal descriptions, for this makes later identification of genus and species (and, even at times, family) impossible. In order to define native terms on an etic grid one cannot rely solely on those features which are considered important by that culture. Different names for different life stages of the same animal or different sex may be misleading. The only way to achieve completely verifiable etic classifications is to collect the animal yourself and examine it or have a zoologist examine it.

It was the purpose of this paper to present both theoretical and methodological observations on ethnosemantic field work. The outline of the techniques used in data acquisition not only demonstrated problems encountered in field work but also the value of such tools in anthropology as means of gathering replicable and verifiable information. It was also hoped that the reader would gain insight into the formal structuring of the animal world for Otomi speakers in the Mesquital Valley. The interaction of a shallow taxonomy with an over-riding dimension of

meaning provides a focus for future research. Can a correlation be found between the educational, economic, ecological and sexual standing of a speaker and the cognitive ordering of his animal world?

Notes

1. Readers are invited to send for a complete list of the questions asked for each category of animal.

2. A complete list of the one hundred animals in Spanish and Otomi and a nearly complete list in English and Latin will be sent on request. Ellen Rafferty Box 1510 SUNY Binghamton, Binghamton, N.Y. 13901.

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THE POLITICAL ORGANIZATION OF THE JUDICIAL DISTRICT AND THE MUNICIPAL GOVERNMENT OF IXMIQUILPAN, HIDALGO

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Ixmiquilpan es el centro administrativo del distrito judicial al cual pertenecen los municipios de Alfajayucan, Cardonal, Chilcuantla e Ixmiquilpan. Para la eficaz administración del municipio, el Presidente Municipal cuenta con el Secretario Municipal; Tesorero; Juez Conciliador; Comandante de Policia; Alcaide; y Administradores del mercado, del rastro y del Departamento de Limpieza. Los diferentes departamentos se encargan de estadísticas vitales; ingresos y egresos municipales; la aplicación de justicia por faltas menores; la vigilancia y protección de los ciudadanos; la detención y cuidado de los presos; el intercambio comercial en días d e mercado; el deguello de reses y porcinos bajo condiciones sanitarias; y la limpieza general de la ciudad tanto de las calles, como la colección de basura de todas las casas.

Introduction

The purpose of this paper is to describe the political organization of the judicial district, and the municipal government of a Mexican town, in order to gain some understanding of how small communities in Mexico perform their daily governmental tasks.

To obtain this understanding, I have concentrated on the "decision making" offices for the district and the municipal government. I have found all of the department heads most helpful and cooperative, but my deepest appreciation should go to Dr. Abelardo Olguin (Municipal President), and Mr. José Uranga Treviño (Municipal Secretary) for their sincere and continued encouragement throughout the study.

To familiarize the reader with the area, I will deal briefly with some geographical and historical characteristics, as well as some relevant statistical data.

Secondly, I will relate the judicial district and municipal structure to the State and national levels, in order to see similarities or distinctions between each one of these "authority levels". I will investigate the legislative, judicial and executive branches at each level, describing their functions and analyzing differences where applicable.

Since Ixmiquilpan is the administrative center for the district, I will then present the district offices, their functions and interrelated activities with an accent on cases most peculiar to the area. The offices involved here are: District Judge, District Attorney, and District Administrator of Taxes.

In the last section I will deal directly with the municipal government, describing the functions of each office and department head, as well as the interdepartmental arrangements that exist in order to get things done.

The Setting: State Topography and Demography

The State of Hidalgo is located from latitude N19°36' to 21°24' and from longitude W97°58' to 99°54' adjoining to the north with the State of San Luís Potosi, to the east with the States of Veracruz and Puebla, to the south with the State of Tlaxcala, and to the west with the States of Mexico and Querétaro.

The State of Hidalgo covers an area of approximately 4.8 million acres, and 1968 figures showed a population of about 1.2 million. The eastern part of the State is crossed from north to south by the Sierra Madre Oriental (Eastern Ridge). The west and southwestern part of the State is a high dry plateau known as the Valle del Mezquital (Mezquital Valley). The Valley is situated in a "rain shadow" which accounts for semiarid conditions; three main irrigation projects supply the agricultural lands: Tula, Ixmiquilpan, and Meztitlan, but still much water is needed especially in the Mezquital Valley.

The Mezquital Valley covers an area of approximately two million acres, which represent twenty-seven municipios (counties) or about forty per cent of the state's area. Estimates in 1968 showed a population of about 337,000 in the Valley, 90,000 of which were identified as Otomi Indians. In the same year, there were about 120,000 acres under irrigation, but this figure has increased steadily in the last three years, to the point that about ten per cent of the Valley is now under irrigation. The ten per cent estimate is from the cajero de juntas de aguas (irrigation projects cashier) in the area. The Mezquital Valley is actually made up of two valleys: Actopan and Ixmiquilpan.

The town of Ixmiquilpan is located at approximately N20°29' and W99°12' coordinates, on the banks of the Tula River at an altitude of 5,600 feet. This area, if not the center of the Mezquital Valley, is certainly the center of Otomi culture. The county has a population of about 35,000, out of which some 25,000 are Otomi. The center of town proper has a population of about 8,000, and some ninety per cent of these people represent a mestizo culture.

Ixmiquilpan is small, but it is an attractive and peaceful town. Its beautiful church built around 1546 is considered a "National Treasure", and indeed it is. The Otomi frescoes throughout the monastery, and the polychrome Otomi designs inside the church, are certainly breath-taking.

The Patrimonio Indigenista del Valle del Mezquital, a Federal agency created for the development of Indian communities in the Valley, has built schools, medical dispensaries, and centers for the development of Otomi craftsmanship all over the area. In Ixmiquilpan itself there is a hospital (with two ambulances) which offers free medical and surgical facilities to the Otomi. There is a shoe factory and an embroidery workshop operated also by the Patrimony.

In the last five years many changes have taken place in the town; most of the streets are now paved, a spacious and clean market has been built, and a central Plaza with an artistic Diana water fountain welcomes the visitor to the city.

There are 44 stores in the central plaza which conduct business from 9 a.m. until 8 p.m. daily (except Sundays). Ixmiquilpan, due to its size, constitutes the biggest regional market in the area, held on Mondays. On this day, people come into town from all over the area to buy and sell their merchandise. Many come just

for social activities; to see a compadre, drink pulque, visit with relatives, or just watch all the pretty girls go by. The market offers a wide variety of goods: clothing, footwear, hats, Otomi embroidery and weaving, meat, vegetables, fruits, prepared meals, beer, pulque, and so forth.

There is a modern library overlooking the Tula River, and a primary, and a secondary school where teenagers finish their high school. The State University is located nearby in Pachuca, where one can pursue a college degree, but some prefer the National University in Mexico City which is three hours away by bus.

The town is very well linked to the rest of the nation; there is a post office, and the telephone company keeps its doors open until 10 p.m. for long distance calls. The Mexico-Laredo road goes through town, and there is bus service to Mexico City every half hour. One bank and two drug stores provide their services in the main plaza.

Five hotels in the town really are not enough to accommodate the hundreds of people who come to the yearly fiestas. The week of August 15 when the patron saint (Señor de Jalpa) fiesta is celebrated, suddenly takes the town into a fabulous world. There are parades and dancing in the streets, mechanical games fill one part of town, while tourists literally buy everything that is for sale. There are exhibitions of agricultural machinery; and Otomi craftsmen display their most beautiful embroidery and weaving.

There are tricycle races for the children, donkey races for the teenagers, and horse races with all the flavor of rancheros for the adults. The dance at the Lions Club may be attended by the State Governor. Folkloric dances from all over the area, fireworks, soccer matches, boxing and cock fights add to the list of attractions. There are also two bull fights, one by the towns people, and one by professional bullfighters. The Municipal Secretary himself was a bullfighter in his younger days.

Perhaps the main attractions are the many television and movie stars who make appearances throughout the week. It takes about three days after the fiestas are over for the town to return to its relaxed atmosphere.

Municipal Government Organization

The municipio of Ixmiquilpan adjoins to the north with the municipio of Nicolas Flores, to the east with the municipio of Cardonal, to the south with the municipios of Santiago de Anaya, Chilcuautla and Alfajayucan, and to the west with the municipios of Tasquillo and Zimapan.

The Municipal Government organization is given in Chart 1; I will examine each one of the departments, starting at the upper level with the Municipal President and Municipal Secretary, and continuing from left to right with the other subordinate departments.

Municipal President. The State of Hidalgo is divided into eighty-two municipios each having a cabecera municipal, (county seat), where the administrative center for the municipio is located. The Municipal President (hereafter referred to as 'President') is in charge of city as well as county government.

In the State of Hidalgo, the President is elected for a three year term

IXMIQUILPAN MUNICIPAL GOVERNMENT ORGANIZATION

CHART I

MUNICIPAL PRESIDENT

MUNICIPAL SECRETARY

PRIVATE SECRETARY

MARRIAGE & MILITARY SERVICE

VITAL STATISTICS

VITAL STATISTICS

OFFICE BOY

TREASURER	CONCILIATOR	DAY WARDEN	POLICE CHIEF		MKT. ADM.	STOCKYARD	SANITATION
	JUDGE	NIGHT WARDEN			MKT. SECRETARY		DEPT. ADM.
CASHIER	SECRETARY	ASSISTANT	SGT. 1ST	SGT. 2ND	LABORER	LABORER	DRIVER
BOOKKEEPER		ASSISTANT	SGT. 2ND	CORPORAL	LABORER	LABORER	DRIVER
LICENSES			SECRETARY	POLICE	LABORER		LABORER
BILL COLLECTOR				POLICE	LABORER		LABORER
BILL COLLECTOR				POLICE			LABORER
				POLICE			LABORER
				POLICE			LABORER
				POLICE			LABORER

starting on December 1, with alternate elections coinciding with the national elections. The President, just as other elected public officials, can not be re-elected for a succeeding term. He presides over the Municipal Council, and appoints all of the public officials in the municipal government. Since the council is the elected body representing the legislative branch at the Municipal level, the law clearly specifies that none of these elected public officials can be appointed to any position in the Municipal Government.

The current President is a young and energetic individual, concerned about getting things done. He has appointed a young team to work with him, and has given each public official clear responsibility for his assigned area. The President is responsible for the correct management of the municipio not only to the Municipal Council, but to the State Legislature.

A report must be sent to the Municipal Council and the State Legislature at the end of every year in office; this report must note all governmental activities of the previous year, and plans of action for the following year. With the appointment of Municipal Officials, the President must also submit salaries for approval by the Municipal Council and State Legislature. The President is responsible for the collection and expenditures of municipal funds. Monthly reports are sent to the State Government covering such items as income and expenditures, military service data, vital statistics and records of criminal and civil cases heard in the municipio. Representing the Executive Branch in the municipio, the President must enforce national and State laws, as well as ordenanzas (municipal laws) and introduce new bills to the Municipal Council for the proper administration of the municipio.

The political functions of the office of President are many: he belongs to dozens of committees from different towns in the municipio with varied interests such as those dealing with road construction, school building, recreational facilities for children, medical dispensaries, and general economic development. He has daily visitors from all over the municipio bringing him all their grievances and projects. One of the biggest problems he has to face is that it is very hard to embark on expensive projects when the municipio is always nearly bankrupt and municipal income remains the same. Many times the President must issue birth, death and marriage certificates to extremely poor people at no charge and this creates a deficit. Several times throughout the year he buys coffins and allows burials without pay at the cemetery. These services are an added expense for the Municipal Government.

The social functions of the office are just as many and versatile. The President must go to graduation ceremonies of schools; gives public speeches at different times throughout the year; organizes committees for the success of the yearly fiestas; attends special invitations from towns in the municipio and in other municipios in the State; and represents the municipio at State conventions.

Municipal Secretary. The Municipal Secretary (hereafter referred to as 'Secretary') is the second most important person in the Municipal Government, and as such his duties are many: he is personnel manager for all public officials in the municipio, and in this capacity he is in daily contact with the department heads; he coordinates with all the departments the different administrative tasks to meet either

normal or unexpected activities that the municipio might be involved in.

Whenever the President is absent, the Secretary exercises the same decision-making authority, and his power in this capacity is seldom if ever contested. Many daily problems are solved before they reach the President. The Secretary is also directly responsible for all incoming and outgoing mail. All official business, letters and memoranda to the State or National Government must be duly signed and checked by him.

The Secretary helps the President prepare his annual report to the Council and State Legislature, giving a detailed account of the previous year's official records, and plans for the following year. He is also responsible for all municipal property, and coordinates with State officials the building of public works in the municipio.

The Municipal Secretary is also in charge of the conscriptos program for local military duty. Registration takes place between March 15 and August 31, to start the following year. On an average, 120 men register yearly. In Ixmiquilpan any male over eighteen is accepted into the program; once the list is completed on August 31, it is sent to the Comandante de la 18 zona militar de Pachuca, who checks over the forms to see that all the requirements are met.

As soon as the forms are checked in Pachuca, they are sent back to Ixmiquilpan for impartial sorting. A number of pills equal to the total number of registered males in the list is dropped into a hat. The pills are divided into three colors representing 9%, 11% and 80% of the total number. Those whose names match the 9% color, will be classified as reserves; the names matching the 11% color will be inducted into active military service for one year; and the remaining 80% will constitute the conscripto corps for the following year.

Conscriptos must buy their own uniforms, and do not get any pay whatsoever during their year of service. They must attend military training on Sundays from 7 a.m. to 1 p.m., to learn military tactics at the military base in the Jesús Cortijo barrio.

Sometimes, instead of military training, conscriptos are called upon for public works i.e., painting a school, digging up a street.

Most of the younger conscriptos are mestizos from Ixmiquilpan, or from larger villages in the municipio, who have learned the social reality that in order to work in the towns, they must have their cartilla or draft card. The few Otomis who sign up, usually do so at about the age of 25, but most of them never show up since they are not competing in the socioeconomic scale in the towns.

Besides keeping track of the conscriptos the Secretary also has charge of marriage licenses. Under Mexican law, marriage is legal only if administered by government officials; a religious ceremony does not constitute marriage. In order to get married in the State of Hidalgo, one must be over 21 years old, or else parental consent is required. Marriage is performed at the municipio by either the President, or the Secretary. Several requirements must be met before a license is obtained: physical examination and pre-nuptial medical certificates involving several laboratory tests; four pictures of both the bride and groom; four witnesses over 21 years old if they are single, or younger if they are married.

Photographs of the couple are glued to the Civil Registry with accompanying signatures and fingerprints of the bride, the groom and the witnesses. If the couple getting married do not know how to write, then another set of fingerprints is necessary to take the place of signatures. On the average, 15 weddings are administered monthly, and in eight out of the 15 or about 53 per cent of the ceremonies, a second set of fingerprints is required instead of signatures.

The information recorded on the marriage form is sent to the State capital within the first five days of each month. On the average the Otomi female marries between 15 and 17 years of age and the male between 18 and 20; the male is generally two to four years older than the female. Among the mestizos marriage is most common between the ages of 21 and 22, and both male and female are about the same age.

The Otomi tends to marry close neighbors whether they belong to the same socio-economic class or not. In the center of town, marriage ties tend to be limited to a specific stratum within the socio-economic scale. When the Otomi marries, both the man and his wife will live at his parent's home from one to three years; after having their first child they set up a separate household. The mestizo sets up a separate household at marriage. The Otomi averages six to twelve children (losing about three of them in their infancy); the mestizo averages four to eight children, and their infancy deaths are not as common as those of the Otomi.

In two or three cases every month, people are getting married for the second time; averages indicate that this practice is not dominated by one or the other sex. The males going through their second marriage are between 30 and 35 years old, and the women between 26 and 30. In the State of Hidalgo, the youngest age for legal marriage with parental consent is 14 for girls and 16 for boys. One or two marriages of this sort are administered yearly within the Otomi population.

There has been a steady migration of males to the industrial centers, but some 60 per cent of them return to get married in Ixmiquilpan. After the ceremonies, the men leave again with their wives for the city (Mexico City or Pachuca) where a job and living facilities are already secure. This practice was found among Otomi and Mestizo alike.

Vital statistics records are kept in two books: one is called "original" and the other one "copies," but this is only a technicality since records in each book are entered simultaneously and in hand writing by two different persons. The only difference is that the "original" is kept at the municipio archives, while the "copies" are sent to the State Capital with the yearly records. This book is different from the monthly statistics forms sent to Pachuca in the first five days of the month.

Form 824 is used to keep a record of the stillbirths in the municipio. There is an average of two such births monthly, usually due to the fact that women having problems delivering their babies wait too long to seek medical help. When they finally decide to go to the hospital, it is too late for the doctors to do anything about it, other than saving the mother herself. Stillbirths are most prevalent (about 90 per cent) among Otomi women. The mestizas who live in the more populated areas, have ready access to medical help, and usually seek it in plenty of time.

The municipio registers between 125 and 130 newborns monthly, but the infancy

death rate claims about 20 lives in the same time period; about 16 of the 20 infant deaths every month are infants dying during their first year. Ninety per cent of all infant deaths involve Otomi families. New borns must be registered within forty days, or a ten peso fine is charged to the parents.

Birth certificates are required to attend secondary school, and for many other political-economic functions such as voting, or getting a job. In order to register a child's birth both parents must appear in person, with the baby and two adult witnesses. The child's fingerprints go on the Civil Registry, as well as his parent's names, ages, and address. This is all that is required if the parents live under common-law marriage, but if they are legally married, the child's paternal and maternal grandparents' general information is also entered in the Civil Registry. If the child is a son resulting from a free-union, and his parents later get married by the law, he automatically becomes a legal son, and an entry stating his parents' legal matrimony is made on the Civil Registry. For this purpose, there are wide margins in the Civil Registry book.

The parents are given a boleta de nacimiento which does not constitute a birth certificate but is merely a reminder of where to find the child's records. If a certified copy is required for certain functions as previously mentioned, then a special official sheet of paper is used to copy exactly all the entries from the Civil Registry.

The official paper (hoja con timbre oficial) is a sheet of paper stamped with the nation's coat of arms; it is bought at the Municipal Treasury for 31.50 pesos, and it takes one of the office clerks about fifteen minutes to fill out all the details. These copies are type-written, rather than hand written as in the original book.

Including the 20 infant deaths, the municipio registers an average of 40 deaths per month. Of the 20 deaths not involving infants, about 85 percent are attributed to natural causes, and 15 percent to accidents. "Accidental death" is a broad term used to cover automobile accidents, falls, drowning and homicide; of the monthly average of three accidental deaths only one may be attributed to homicide.

To enter a death in the Civil Registry, a medical certificate is required from either a private physician or from the Health Center. Largely because of the President's efforts, the Health Center issues free of charge the medical certificates for deceased individuals since many Otomies can not afford the luxury of a private doctor. The medical certificate reads either "with" or "without" medical attention. If the certificate issued is "with" medical attention, the doctor writes his medical report: disease, treatment given and probable causes for death, without performing an autopsy. If the certificate issued is "without" medical attention, since many people die away from the urban centers where medical attention is not available, the issuing physician at the Medical Center writes in the probable causes for death according to the information given by the deceased person's relatives. With the medical report, an entry can be made in the Civil Registry, but only if death is attributed to natural causes. A boleta de defunción is given to the deceased person's relatives and form 823 is then properly completed.

While all these legal procedures are going on, the deceased person must be buried but first a permit must be obtained from the Town Hall to be presented to the cemetery administrator. In the municipio there are three cemeteries which have two types of graves; these cemeteries are La Cruz Blanca, El Maye and Fitze, and the types of graves are graded first class and second class. First class graves are those having perpetuity rights, while second class graves have only seven years rights. The fees charged at these three cemeteries are : First class, with perpetuity rights - adults 100 pesos (children 50 pesos): Second class, with seven years rights - adults 25 pesos (children 15 pesos).

A perfect example of the everlasting clash between common law and positive law is present here. The great majority of the burials involve second class graves; even though the law specifies seven years, in reality, never have any remains been exhumed, and perpetuity services are obtained for 25 per cent of the original cost.

In other cemeteries throughout the municipio, only perpetuity rights are available, and a fee of 25 pesos per adult, and 15 pesos per child is charged. A coffin is required in all burials; if the deceased person's relatives can not afford it, they find their way to the President who authorizes the purchase of it.

The preceding steps are followed only when death is attributed to natural causes. If death is accidental, the medical certificate is sent to the District Attorney, who will start criminal investigations and keep the medical certificate. A communique is sent from his office which is filed at the Civil Registry instead of the medical certificate.

If a resident of the municipio dies from accidental causes in another municipio, a communique is sent to Ixmiquilpan providing all information necessary to be filed. If the municipio is within the District, the District Attorney will again start criminal investigations. If the municipio is outside the District, that District's Attorney will start the investigations, and the communique he sends in will be copied by hand in the Civil Registry. It must be an "exact" copy of the communique, with dates, places, and everything written, including signatures. If a resident from outside the municipio dies from accidental death in the municipio, an entry is made in the Civil Registry, and a copy is sent to the deceased person's municipio. The District Attorney will then start criminal investigations with records supplied from the Civil Registry office.

An examination of the municipio's vital statistics records shows an average annual population increase of 2.9%, slightly lower than the estimated National annual population increase of 3.2%. Responsibility for securing and tabulating all these data and for keeping the archives rests with the Municipal Secretary.

Municipal Treasurer. The Treasurer is in charge of all the municipio's income and expenditures; perhaps his most important duty is that of preparing the biannual reports to be sent to the State Legislature, including a detailed account of all economic activities for that period. This is a very important report, because it also includes the budget for the following six months. If the budget for the following semester is not approved by the State Legislature, it is sent back to the municipio with suggested changes; some twenty years have gone by since a report was last rejected from Ixmiquilpan.

A monthly record of income and expenditures is kept in the corte de caja (monthly record sheet) to which all receipts are attached. The main income sources for the municipio are: the market; the stockyard; fees charged for the use of water; business taxes from stores, movie theatres, carnivals, and any other recreational activities such as bullfights and cockfights; industrial taxes for certain products leaving the municipio; cemetery fees; license plates for bicycles (22 pesos), motor cycles (44 pesos), shoeshine boys (22 pesos) and ambulatory food stands (22 pesos); and all fines assessed for traffic violations, disorderly conduct, drunkness, and other such misdemeanors.

The expenditures to run the municipio are many: the Treasurer himself pays all of the employees in cash after they sign the nomina (biweekly payroll). All expenses incurred for the repair of municipal property, as well as equipment and office supplies for each department must be entered in detail in the monthly record sheet. Previously, each department had a free hand in buying any items required, and much duplication of effort was common in the municipal government; the new Treasurer has developed buying procedures which tend to minimize over-spending, and unless an item is absolutely necessary he will not authorize its purchase.

The maintenance and fuel consumption for the operation of the street sweeper, trash trucks and police vehicles, represent a heavy burden to the Municipal Treasury. In 1954 the municipio started handling the administrative functions of the water department, and bill collectors went from house to house to collect for the services rendered. Since the collectors were from Ixmiquilpan and had intimate friendships with many people, the result was that they were not too efficient at collecting past due payments. The new Treasurer now employs two bill collectors from out of town who, with less social credit at stake, are more efficient at collecting unpaid bills.

A monthly report to the State Treasury must be rendered within the first five days of each month, including all of the municipio's income and expenses. For all monetary transactions within the municipal government an entero (receipt) is issued stating who pays how much, and for what reason. These enteros become part of the municipal archives at the treasury.

Conciliator Judge. Second chapter, First Section, Article 2 of the Organic Law for Tribunals for the State of Hidalgo, authorizes a juez conciliador (Conciliator Judge) in each municipio. His jurisdiction extends over all the municipio and his office is located at the county seat.

Each municipio has one Primary Judge and three Secondary Judges, who are appointed by the municipal council during the first 15 days in December; their one year term starts on the first day of January. The Primary Judge discharges his duties throughout the year. The Secondary Judges discharge their duties during a Primary Judge's prolonged absence; in cases where the Primary Judge's decisions are being challenged, or when he asks to be excused because of personal involvement (kinship, friendship) with any of the litigants.

Certain requirements must be met to be appointed as juez conciliador: one must be a Mexican citizen in full exercise of political rights; know how to read and write; enjoy a good moral reputation; and reside in the municipio. One can not

be a religious minister of any group; nor be in the active military service; nor be a Federal appointee or employee; nor be a primary or rural teacher while in office.

Appointment by the municipal council is mandatory; fines ranging from two to ten pesos can be assessed against Conciliator Judges who fail to discharge their duties. Continued failure to perform may result in imprisonment from one to ten days. Nevertheless the law is flexible to excuse certain citizens from performing the duties of Conciliator Judge: persons over 60 years old, persons in extreme poverty, and persons affected by diseases that will impair their duties as judges, are excused from such responsibility.

It is the duty of the Conciliator Judge to investigate with the appropriate conciliatory approach any civil case requested by any individual; to pursue any criminal investigation in a conciliatory way whenever it is requested; to advise in financial transactions not exceeding 500 pesos, in order to protect certain individuals from being exploited; to initiate legal proceedings for investigation of crimes committed in the municipio, and submit them to the District Judge within 48 hours, who in turn will start prosecution according to the law; to carry out all civil and criminal investigations ordered by the State Supreme Court or District Judge; to submit to the State Supreme Court or District Judge any information required; and to discharge his duties according to circular letters from the State Supreme Court or District Judge.

The Conciliator Judge must be an extremely well adjusted person, with great patience and a philosophy of fairness for he must make daily decisions involving the lives of many people. His work involves family disputes of many kinds: young couples wanting a divorce before completing their first year of married life, child desertion, and concubinage. Based on the cases of child care payments he has resolved, the current Judge estimates that ten per cent of the Otomies in the municipio practice polygamy.

Divorce can not be granted during the first year of matrimony, and wives demand their legal rights as spouses until the divorce is final. When no children are involved, a divorce is easy to obtain; when children are involved, the case must go to the District Judge who, after reviewing the matter, will set a monthly payment for child care.

In the State of Hidalgo, "natural children" (that is, born out of wedlock) have the same rights as legal children, and in inheritance cases where land is involved, this proves to be a very sensitive situation. The oldest child thinks of primogeniture yet the law stipulates equal partible inheritance not only for all children (legal and natural), but also for the concubine who has the same inheritance rights as any child if she lived with the deceased during the last five years of his life. This procedure is followed when the legal wife dies before her husband. If only the father dies, 50 per cent of the inheritance will go to his legal wife, the other 50 per cent will be distributed equally among all his children (legal and natural) and the concubine. Many fights, and continuous harassment of individuals, occur because of such inheritance disputes.

Fences are not very common in Otomi country, but every one knows his territorial limits, and suits for damage caused by goats and pigs are rife. Verbal assault, ridicule in public, child possession disputes and many other complaints are brought

before the Judge. Solomon-like, he must conciliate between the parties involved, but fines and jail sentences of one or two days figure prominently among his sanctions. People accept his adjudication, since it involves no positive law procedures, which prove to be much more expensive. It is evident that most of his power to adjudicate comes from the people, for his judgments ideally represent the consensus of the society. The unwritten law that one must pay for his wrong doings is a dynamic daily normative process in Ixmiquilpan.

Wardens. Under the Municipal Government there are two Wardens (alcaides); the Day Warden who is more or less incharge of the whole operation, and the Night Warden. Each one of them has a capataz (assistant), and each works a twelve hour shift seven days a week.

The Day Warden is primarily concerned with the prisoners. Records are kept for each prisoner including name, residence, offense, length of sentence and fine imposed. There is a daily record kept for all official business at the Warden's office. Incoming, release, and transfer activities are meticulously kept. Transfers involve appealed cases to the Supreme Court of the State at Pachuca. The Day Warden takes a prisoner to Court (which is in the same building) when his trial comes up, and back to jail after legal procedings are over.

The Warden is also responsible for feeding the prisoners. Of the 55 long-term inmates in 1971 three of them were females who were kept in the carcel de mujeres (women's jail). These three women took weekly turns at cooking. The centuries old staples (corn, beans and squash) make a daily appearance, with nopales (cactus), meat, avocado and fruit varying the diet sporadically.

Because of their tasks, prisoners are constantly coming in and out of the jail in a rather informal way and so the Warden takes roll call in the morning and in the evening, around 6 p.m. The current incumbent does not carry a gun like many Wardens do in Mexico, but he has a strong personality and since he is a fluent speaker of Otomi he manages to get around the most difficult situations and accomplish his assigned tasks. By about 5 p.m. he has to turn on the water fountain in the plaza by activating two push buttons and two single pole single thrown switches.

The Warden's assistant helps the Warden with many odd jobs. One of the privileges prisoners enjoy is that of drinking three liters of pulque a day; the Warden's assistant studiously keeps a daily record to see that this number is not exceeded. Pulque is an important source of vitamin B, and since most of the prisoners drank in quantities larger than that before incarceration, three liters is not enough to cause inebriation especially since the drinks are staggered throughout the day. No drinking of pulque is allowed after 6 p.m. A lot of time in the capataz's day is devoted to buying cigarettes, matches, sardines, chiles, writing paper and envelopes, and nonalcoholic beverages for the prisoners. The prisoners earn a small stipend from their daily service to the town as streetsweepers under guard.

Many are the duties of the night Warden: he must type all of the day's paper work and bring the T.V. out to the Town Hall portico for citizens to watch until 11 p.m. Soccer games are followed with daily passion. About 9 p.m. he takes the final roll call for the day, and about 10 p.m. he turns the water fountain off. During his shift most of the arrests for inebriation take place so that his job

calls for much tact and persuasion.

Perhaps the most important duty to which he is assigned is that of allowing conjugal visitors to spend the night with their husbands; there is no specific time or day alloted for this right, but practicality makes of Sunday the preferred night of the week. About 98 per cent of the prisoners come from out of town, and Monday is market day. Since Ixmiquilpan has the biggest regional market, women must come there to buy their staples. Thus they come to town on Sunday afternoon, spend the night with their husbands in jail, obtain their supplies on Monday at the market, and return home Monday afternoon. I was told that inmates have great respect for these few intimate moments since there are no special rooms for conjugal visiting, and everybody must sleep in the same big dormitory. The term conjugal in this instance encompasses fiances or girl friends for single individuals. I was also told that the female prisoners never ask for their husbands or boy friends to come in.

The nocturnal Warden's assistant aids his superior by occasionally checking to see that things are under control in the jail, by supplying the prisoners with their last daily requests (cigarettes, nonalcoholic beverage, etc.) and by catching up with any work load unfinished during the day. He comes in most handily during arrests for drunkenness since sometimes it takes two to three persons to pick up a drunk and put him inside the jail to sleep it off.

The jail consitiutes a particular arrangement, since it must provide detaining facilities not only for the municipio, but also for the District at large.

There are around 55 long-term prisoners (three years or more), but weekly arrests for minor offenses such as drunkenness or urinating in the streets account for some 20 short-term imprisonments (less than 72 hours). Long-term prisoners are those serving time for criminal offenses. They need legal assistance and there is a judicial process involved with their cases. Short-term prisoners are those who break a city law and might either pay a fine right on the spot, or be detained from 12 to 24 hours.

The minimum taxes paid by the municipio residents, and the meager State and Federal financial aid barely pay for municipal debts contracted for public works (market, paving, lighting, etc.). There is a continuous deficit in the Municipal Treasury and more people are needed for the proper administration of the municipio. By allowing trustees prisoners to work on municipal projects the President has filled all the "labor" positions which would demand a much higher pay if employees were hired from the ordinary available work force.

By allowing the prisoners to become, in effect, temporary municipal employees, the President gives them the chance to become politically aware of the rights and duties that all citizens should enjoy. I mentioned previously that most of the prisoners come from smaller barrios in the District, and, for many, a jail sentence proves to be an enculturating period, especially if they are lucky enough to work during their prison term. They become aware of State and National affairs. They become consciously aware of their place in society, and realize that "the better things in life" are available for them, once their sentence is terminated. Rehabilitation does take place, since "habitual criminals" are very rare, and, once

released, the trustees seem to become effective citizens, with a new world view of "national" sentiments.

Trustees look forward to working for the municipio, since in this capacity they not only enjoy an income but also many privileges. Other prisoners who are not on the pay roll are selected for work details such as sweeping the streets, cutting tree branches, fighting fires, etc. This gives them the chance to go out into the town, to break up the monotony of jail routine.

Inmates play volleyball, and once in a while the President lends a T.V. for them to watch. Many work details come up during the week, and those unable to go outside weave colorful baskets which friends sell from 10 to 15 pesos, and hats which are sold for 25 or 30 pesos.

Police Chief. The Police Chief has divided his force into two sections: traffic, and municipal law enforcement.

To the traffic section of the Police Department, the Chief has assigned a Sergeant First Class, and a Sergeant Second Class to insure the proper traffic flow through the city. Bicycles swarm the streets, and with the increasing number of automobiles going through the area, the danger of accidents is omnipresent. The Chief has been appointed by the State Government as Traffic Department Director for the municipio, and this includes not only the town of Ixmiquilpan but all the roads going through the municipio.

Any traffic accident in the municipio must be investigated immediately. Some are handled and settled in Ixmiquilpan, while others must go to the State Traffic Commission in Pachuca. In order to reach the Traffic Commission in Pachuca, the Chief first investigates the accident in the municipio. His report is then rendered to the District Attorney who in turn submits it to the State Attorney General to start legal proceedings in conjunction with the State Traffic Commission. Minor accidents where no personal injury is apparent are settled in Ixmiquilpan; two to three such accidents are recorded monthly for the municipio. Also every month, about 60 traffic violations are recorded, and these include speeding, going against traffic on a one way street, illegal parking, driving under age without a driver's license, etc. Of the 60 violations in the municipio, ten such infractions are recorded as a monthly average for the town.

Law enforcement is provided mainly in the core area due to a shortage of personnel. The Police Chief himself works seven days a week. The policemen all work long shifts, between twelve and fourteen hours a day.

The majority of disorder is caused by drunkenness: canteen owners will have noisy customers removed from the premises, but drunken fights are common. A decline in the theft rate has been registered since the current Police Chief assumed his duties about two years ago; incarceration proved to be a deterrent to this problem. Thefts of over 500 pesos must be investigated by the District Attorney.

There are two peaks during the year when most disturbances requiring law enforcement occur. The first one is reached during July, August, September and October when Otomi migrant labor from all over the Mezquital Valley pours into Ixmiquilpan for the harvest season. Some 90 per cent of the disturbances involve Otomi individuals at this time of the year. The second peak is reached during the December festivities, and here 90 per cent of the cases involve mestizo individuals, es-

pecially mestizo teenagers during Christmas and New Year.

A misdemeanor prevalent during the harvest season is that of urination and defecation in secondary streets. A weekly average of twenty cases is attributed to the influx of a large number of people, and the lack of public facilities throughout the town.

The Chief has initiated three measures to lower the probability of disorder: 1) since the carrying of arms is prohibited, the steps he takes to collect the numerous guns, knives and large pocket knives effectively diminish serious criminal offenses. 2) Whenever a harmless drunk is found in the street, or asleep in a canteen, either the Chief himself or any of the policemen will take this man safely home. 3) Many times during the month the Chief allows persons passing through (stranded youngsters and visitors) to spend the night in the backyard of the Town Hall.

Policemen, in pairs, ensure a certain tranquility by a nightly round in the town, closing businesses at 9 p.m. (canteens, mainly, since other stores close at 8 p.m.). All businesses may remain open until 11 p.m. during the month of August when the yearly fiestas are celebrated.

A few minor incidents are almost unavoidable at the market on Mondays, but rarely anything serious develops there. In the past, many factions plagued the town and fights and thefts were common occurrences, though these have diminished in recent years.

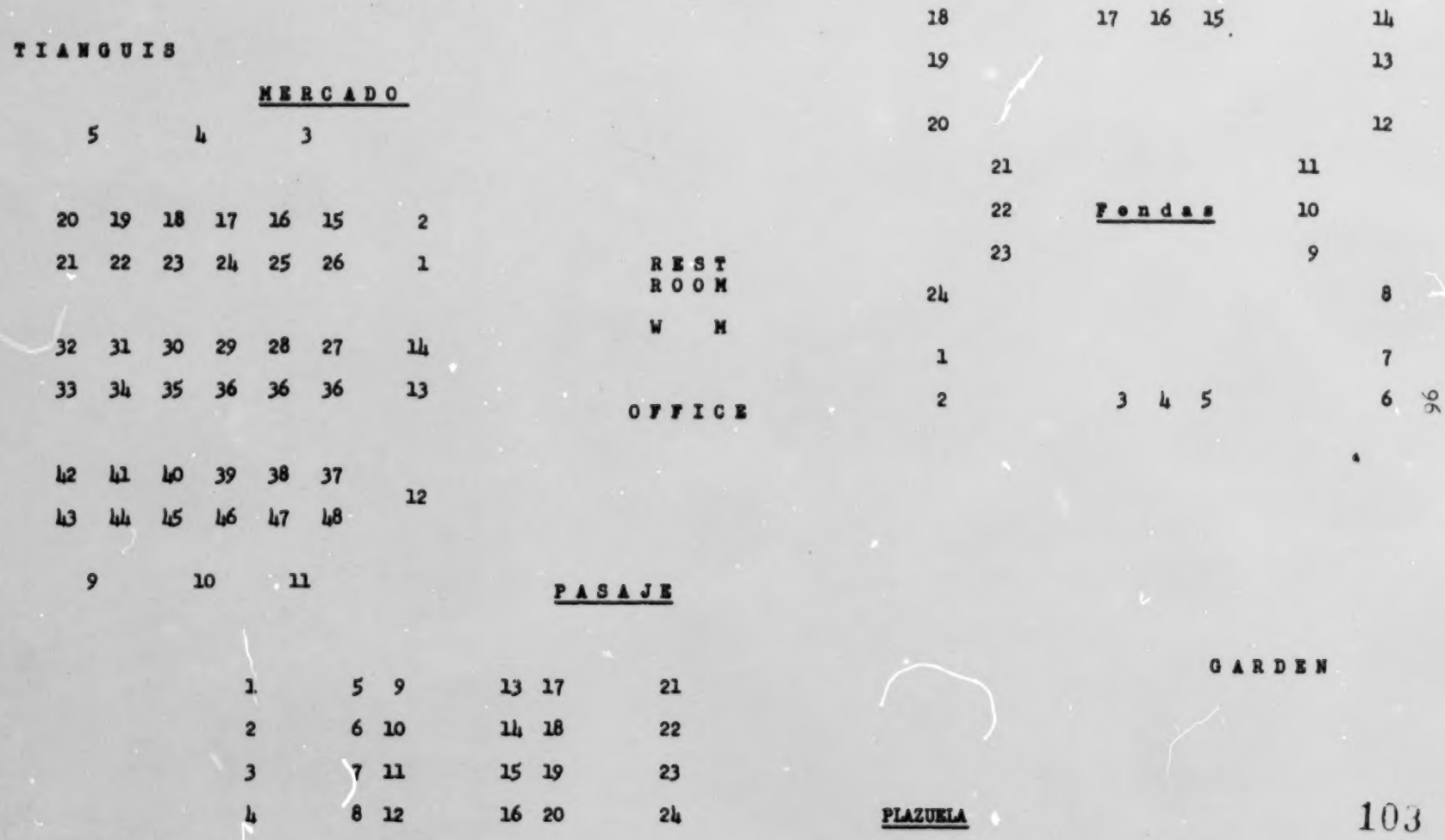
Among other assignments to the police force are the apprehensions ordered by the District Judge, District Attorney, Municipal President and Conciliator Judge. Market Administrator. The market is located in the north east part of town, just one block east of the main plaza. Economically, the market is the most important single unit of the Municipal Government since it represents about forty per cent of the municipio's income. The market has two basic divisions: regional and permanent.

The regional market is conducted on Mondays and covers all of the permanent market area in addition to planchas (raised cement slabs) and piso (ground) stalls which can be obtained to the north of the permanent market area (see chart 2). The sidewalks all around the market and parking lots are also rented. There are five men in charge of collecting dues from persons setting up their stalls. For small investors, those occupying between one and three square yards and selling small miscellaneous items, the rate averages about 1 peso per square yard. For bigger investors, those selling clothes, shoes, etc., the rate averages about 2 pesos per square yard. Eighteen pesos is the maximum charge in the open area of the market where merchants cover their stalls with canvas for protection against the elements. The open market is divided into sections, each one cencentrating on a certain group of similar products. A tax of one to two pesos per box is charged for the sale of certain items not produced in the area, such as sugar cane, mangoes and avocados.

Monday is a very busy day for the Market Administrator: a few complaints arise over payment for space rights (merchants object being told in which area to sell their products); and late in the afternoon a few arguments may arise over a

IXMIQUILPAN MARKET: LOCATION OF STALLS

CHART 2



beer, or a glass of pulque.

It takes all of the Sanitation Department employees, in addition to the four laborers at the market to get it clean on Tuesdays. On Fridays, the permanent market is washed out completely and great efforts are made to keep it clean throughout the week.

The permanent market is divided into five sections for administrative purposes (See Chart 2): 1) plazuela (area around the garden or square); 2) pasaje (passage); 3) fondas (eating and drinking facilities); 5) mercado (market proper).

Plazuela

In the month of July 1971 there were seven merchants scattered in the plazuela. Four of them selling atole (a gruel of maize pounded to flour); two other places specialized in barbecue (native dish made with goat meat); and the last business enterprise in the plazuela concentrated on selling fruit juices. The atole stands paid three pesos daily fee; the juice stand paid two pesos daily; one barbecue stand paid ten pesos every other day, while the other paid twelve pesos every other day.

Pasaje

Each one of the 24 stalls in this area rents for four pesos daily; if any merchant occupies more than one, he pays at the same rate for additional stalls. The merchandise sold here included: refreshments (1, 9), hats (2, 7, 8), stainless steel and iron tools (3, 4), textiles (5, 6, 10, 17, 19, 20), miscellaneous (11, 12, 13, 14), fruit juices and refreshments (15, 21, 22), hardware (16), coffee (18), flowers (23) and clothing (24).

Fondas and Tianguis

Since these two sections demand a comparison, we should look at them simultaneously. Both the fondas and the tianguis provide the same services; both sell the same type of prepared foods; both are open about the same hours during the day; and owners in both sections are bilingual (Otomi and Spanish). There are four basic differences: 1) the tianguis is outdoors while the fondas are indoors; 2) the tianguis pays higher rent, seven pesos per stall, while the fondas only pay four pesos; 3) for exactly the same meal, prices are about 30 per cent lower at the tianguis; 4) pulque is sold only at the tianguis.

The interesting phenomenon is that for at least one year, seven stalls in the fondas (numbers nine through fifteen) have been empty, while only six stalls in the tianguis section have been in operation. We should also note here that on a monthly basis twice as many people buy at the tianguis section. Why do the tianguis owners prefer to fight the elements and pay higher rates than the fondas? The answer to this question is that the tianguis constitutes the social activity center of the whole market.

Mercado

The mercado section is divided into 48 stalls. Each single stall rents for three pesos daily and each double stall for six pesos daily. A distribution of products sold by location is as follows: miscellaneous (1, 2, 11-14), meat (3-9), meat (15-20), poultry (10), vegetables (21-26), condiments (27, 28), vegetables (29,

30-35), fruits (36-46) and vegetables (47, 48).

A card is issued to each stall owner in the permanent market. It is good for four months and holes are punched in it for each day that rent is paid. About ten merchants pay monthly (not in advance); others pay weekly, usually on Tuesdays after the big market day on Monday when they make more profit; and about 75 per cent of the merchants pay their rent daily.

The Market Administrator is economically dependent on the Treasurer since a detailed monthly account must be turned in showing all income and expenses. But for the administration of the market and any problems arising within it, the President has given him full responsibility. All matters concerning the care and upkeep of this Municipal property are his duties; any repairs are promptly made, and receipts are kept for everything bought, since they must be turned in at the end of the month to show all expenses incurred.

Ixmiquilpan is the biggest regional market in the area, and merchants from Alfajayucan, Zimapan, Tasquillo, Actopan, Pachuca and Mexico City make their weekly round to town on Mondays, in addition to a goodly number of merchants owning stores in Ixmiquilpan who also set up stalls in the open market on Mondays.

Stockyard. The stockyard is located on the east side of town just one block south of the new market. Cattle are kept for butchers at the feeding grounds for a maximum of three days and slaughtering and cutting services are provided. Some cattle brought in from the nearby mountain ridge must be slaughtered right away, since they will not eat alfalfa at the feeding grounds and will begin to lose weight; others brought in from the plateau region are kept at the feeding grounds for three days, but the carnicero (meat store owner) himself must bring in the alfalfa and feed his cattle since the stockyard does not furnish the feed.

Cattle on the hoof are delivered to the stockyard and picked up by the carniceros after slaughtering and cutting. There are twelve carnicerias in town, and the meat price is pretty much the same in all of them. Fees of 15 pesos per cattle, 11 pesos per big hog and 9.90 pesos per small hog are charged. A weekly average of 25 cattle and 40 hogs are slaughtered, and it takes the workers an average of one hour per head and half an hour per hog, to have them slaughtered, cut and ready to go. There are four stalls for slaughtering and, once cut, the meat is hung from hooks in the storage area; no meat is left out over night.

The average price of cattle on the hoof is 5 pesos per kilogram. If the average weight of cattle is 400 kilograms, the carnicero pays 2000 pesos for it. After transportation, feeding and overhead expenses are added, the total investment per beef averages 2500 pesos. Once cut in quarters, the actual meat for sale at the carniceria is about 50 per cent of the weight on the hoof. In this example, it would be about 200 kilograms. Meat is sold at the average price of 12 pesos per kilogram of meat with bones, and 16 pesos per kilogram of boneless meat. If the carnicero sells the meat at an average price of 14 pesos per kilogram, it would mean an income of 2800 pesos, if not equal to the amount invested, certainly a meager profit. Sometimes the meat price drops and an investment loss is unavoidable.

Since each of the twelve carniceros work with a limited capital, other incomes

from the same investment are sought, and this "secondary" but important part of the business is where the actual profit is made. Only the horns and hoofs are thrown away, everything else is sold. Skins are sold to compadres for household usage or by setting up a stall at the Monday market for direct public sale. They may also be sold directly to representatives of shoe factories in Mexico City. The price per skin averages from 50 to 70 pesos; bones are sold at 25 centevos per kilogram for the manufacture of fertilizers; fat is sold at 4.50 pesos per kilogram for the manufacture of soap; all the viscera are sold at 15 pesos per kilogram to persons who cook it in special beef recipies called chicharrones (really pork rinds, but any viscera prepared a certain way is also called chicharron, especially in the tianguis area at the market).

The average price of hogs on the hoof is 6 pesos per kilogram, and from a 120 pound hog 70 pounds of meat can be sold. As with the cattle, all the viscera are sold. Hog prices fluctuate a lot more than cattle prices.

Slaughtering of goats is one service not provided by the stockyard; goats are prepared in the traditional and delicious barbacoa. The people who prepare it pay the Town Hall a tax of 6 pesos per slaughtered goat, even though they do the slaughtering themselves, and at their own houses.

Since the stockyard is the only one in the municipio, slaughtering of cattle, hogs and goats takes place clandestinely in other villages.

The Stockyard Administrator collects all the fees and records income and expenses incurred. He has a free hand at buying anything that is needed for the proper administration of the stockyard, and he takes to the Municipal Treasury a weekly report with all the receipts showing income and expenses. The care and cleaning of the building are his responsibilities also, since periodic checks by the sanitation inspector are made.

Sanitation. A street sweeper and two trash collecting trucks provide the services to make of the town one of the cleanest in the area. Since on Monday market day the town is usually crowded, the collecting of trash and sweeping of the streets is accomplished from Tuesday to Sunday. One of the reasons why the town is so clean is that most people sweep their sidewalks in the morning, pushing the dirt in the street for the street sweeper to collect later. The two trucks collect the trash brought to the front door of the houses and takes it to the dump about ten miles north east of Ixmiquilpan (no fee is charged for this service).

The biggest task the Sanitation Department has is that of cleaning the market on Tuesdays. For this purpose the four laborers assigned to the market join in the sweeping of the market's open area, parking lots and sidewalks. It takes all these people all day long to get the market clean again.

In reality, the whole operation of the Sanitation Department is under the Municipal Secretary since seven of its nine members are prisoners; and the Municipal Secretary sees that the proper care and maintenance is given to the sweeper and the trucks.

Conclusion

Since my task was to describe, without in any way evaluating, the political

organization of a small town I have done so in the greatest detail at my command. In so doing, this has negated the possibility of a discussion of the methods I employed to obtain such varied and multiple data. It should be evident, however, that in a field period as short as six working weeks, I could not have achieved the wealth of detail that I did, without establishing an extremely close and effective rapport with my informants. While, therefore, I completed my assignments by the use of various techniques which I believe I familiarised myself with, my constant preoccupation was to foster a specially deep rapport through particular kinds of participation and observation. As witness of that approach I have chosen to let the data speak for me.

EDUCATION: ASPIRATION AND OPPORTUNITY IN A MEXICAN TOWN

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Se persigue el estudio de una cabecera regional, situada en la parte más fértil del árido valle de Mezquital (estado de Hidalgo, Mexico) comparándola con sus 4 comunidades satélites en la zona desprovista de riego. Se enfocó principalmente la influencia de multiples profesores como potenciales agentes de cambio social, y las aspiraciones de los estudiantes y sus familias. Se analizan las modificaciones y defectos del cuestionario empleado como técnica básica. También se analiza el sistema educativo en Mexico con relación a las oportunidades de la región, las frustraciones de los graduados de las escuelas secundarias en cuanto a la ausencia de posibilidades para emplear las técnicas adquiridas que, unido a la falta de influencia, resulta en la moderna tendencia de emprender una carrera técnica en preferencia a la del profesorado. Se sugieren nuevas avenidas para investigaciones futuras.

Introduction

This paper is a study of student aspirations and educational opportunities in a regional Mexican town. It is a result of seven weeks of field school training during the summer of 1971. The emphasis of the field school was placed on methodology and the use of workable field techniques; it was a period of learning and experimentation. Since methodology was the primary orientation and the time available was limited, the data and findings represent a tentative, rather than conclusive, analysis of a problem formulated hazily before leaving the United States. Nevertheless, the problem was one which was found to be applicable to the situation in Tasquillo, where I lived.

A discussion of Tasquillo to place it in context in its geographic, economic and social setting, and a brief summary of the Mexican educational system, will be helpful in understanding the total study.

The Setting

Tasquillo is the cabecera (county seat) and largest town of the municipio (county) of the same name. The 1970 census gives the municipio a total population of 10,988 persons. The town itself consists of 394 families and 2,235 persons, and is located in the arid portion of the Mesquital Valley in the state of Hidalgo. This area is the traditional home of the Otomi Indians, and indigenous group that has for the major part of this century lived in their dispersed non-nucleated settlements scratching out a meager existence from their surroundings, letting progress pass them by. In recent years, through the combined efforts of the federal government and the PIVM (Patrimonio Indigena del Valle del Mesquital, commonly known as the Patrimonio), attempts have been made to upgrade the standard of living in all aspects and to bring the Otomi within the sphere of the national culture. The Patrimonio was created in 1954 by federal grant and has been dedicated to providing the following: increased irrigated land for agriculture, improved health and sanitation facilities, more schools, roads, electricity and

potable water, and the production of and markets for native handicrafts. Its success has been notable; much, however, remains to be done.

Tasquillo is located in one of the most fertile and productive parts of the arid region. The Tula River runs through the northern section of the town and has always provided some water for irrigation. Although land available for agriculture was extensively increased with the expansion of this system in 1969, there has never been, and still is not sufficient productive land to support the population. The inhabitants of Tasquillo call their valley the 'oasis' and this it does appear to be. Viewed from the surrounding hills one sees irrigated fields surrounding an area carpeted by tall green trees. Beneath these trees lies Tasquillo, invisible from the hills. There is great contrast between this apparent lushness and four satellite communities, all within thirty minutes walking distance or less, where the irrigation water either does not reach or only partially reaches. As one leaves the irrigated sections, the land very quickly gives way to numerous varieties of cacti and other desert flora; the living pattern and house types change radically; and one is aware of a far more traditional life style. These four communities, with a combined population of 2014, nearly equal to that of the cabecera, are considered in this paper as an integral part of the wider community of Tasquillo. The people avail themselves of cabecera goods and services; they send their older children to school there, and the merchants depend on their business. Thus Tasquillo is an important point of orientation for the outlying settlements and represents in fact a community actively serving over 4,000 people.

Tasquillo is connected to the old Mexico City-Laredo highway by a short access road coming into and out of town. Most of the town's commercial activity takes place on this main paved road and around the central plaza. Here are located numerous general stores, three restaurants, the hotel, a tortilleria, bicycle repair shops, a construction supply store, three cantinas, butcher shops, bakeries, a corn mill, and the small open-air daily market. The municipal government building, irrigation office, health clinic, church, telephone and post offices, and the primary and secondary schools are all located either around the plaza or along this main road, as are the homes of many of the town's more well-to-do citizens. While this central part of the cabecera has had running water and electricity for nearly seventeen years, a more distant sparsely populated area of the town received electricity late in 1970, and one of the satellite communities within twenty minutes walking distance received running water just in August, 1971. This does not mean that water is piped into the house, it simply means that there is a community faucet every few hundred yards and the people no longer have to haul their water from nearby natural springs. For an additional fee, the water can be piped into the individual homes. In the most heavily populated parts of the cabecera, water is piped directly into the house; where settlement is more dispersed it is not.

Although there has never been sufficient land available to support the population, agriculture is the primary source of subsistence and income. Most of the adult male population are either totally or partially dependent on agriculture of some type, either as small land owners, a medias,[1] or as day workers during

planting and harvest periods. Merchants, carpenters, construction workers and teachers make up the other primary occupations. There is no industry in Tasquillo and since much of the agricultural and construction work is seasonal, some of the men are forced at various times of the year to seek work out of the area, usually in Mexico City. Many of Tasquillo's men have also spent anywhere from six months to seven years in the United States as braceros under the old contract system allowing Mexican nationals to work temporarily in the United States.[2] Because of limited local job opportunities most families have at least one or more members who have left the area to work and reside both temporarily and permanently in the large urban areas of Pachuca or Mexico City where they find both unskilled as well as professional work, depending on educational and experience background.

Tasquillo, for a rural community primarily dependent on agriculture, has a reputation for having many teachers. The people say, "This is a town of many teachers," or, "We have many professionals here," referring to the teachers. Unfortunately, an accurate census of resident teachers was unavailable, but estimates ranged from 100 to 300, some actively teaching in and out of the municipio, with others retired. Due to their influence, there is great interest in education and the benefits advanced schooling may bring. The teachers are visible examples of these benefits. They live in nice homes in the cabecera, they dress well, they almost all own cars, they have television sets and other objects indicating economic well-being, and they are ambitious for their own children. They also recognize the educational problems and the difficulties facing the young people today as they try to get ahead.

Because of its location on the main highway and because of a very efficient public transportation system, Tasquillo has for many years been influenced by and has had direct links with other parts of the state and nation. Hourly buses connect Tasquillo with its political center of Zimapan 25 miles to the north, to the major regional market town of Ixmiquilpan 12 miles to the south, to the state capital of Pachuca, and finally to Mexico City, just three hours away. Tasquillo has no newspaper or other publication, but because of daily contact with other parts, especially Ixmiquilpan, local, state and national newspapers and magazines are brought into Tasquillo and shared among the people there. Nearly every household owns a transistor radio and over 70 television aerials were counted in the cabecera; thus current news is widely disseminated, and the cabecera people seem very aware of what is happening on both the local and national levels.

The population of Tasquillo and its surrounding communities seems to be almost entirely of local origin, exhibiting varying levels of acculturation. For this reason I found the terms mestizo (person of mixed parentage) and indigena (native) in the usual sense of the words difficult to use to relate to the people there. The people themselves say, "We are all Mexicans," and also, "We are all from the Otomi." Basically to them it means the same thing. There has been no recorded influx of outsiders to mix with the local population. In interviews with members of 57 different households, consisting of some 119 adults, only 12 had been born outside the state of Hidalgo. Many of the cabecera families not only have close relatives residing in the large urban centers, but are bound by kinship

ties with people living on the periphery or in the surrounding more traditional communities. For this reason the people also say, "This is a small place, and we are all one family," and "Everyone here is related." It seems quite clear that the population is primarily of indigenous origin, descended from the Otomi, at different levels of acculturation, the degree of acculturation diminishing proportionately as one leaves the cabecera. In this paper, when the term indigena is used, it will be referring to those families or people who follow the more traditional ways of living and are less acculturated than most of those in the cabecera itself.

Leon-Portilla (1962:68) suggests two processes of acculturation in Mexican-Indian communities which seem to be applicable to Tasquillo. The first he calls 'spontaneous acculturation,' which occurs in communities near or at least under the informal influence of metropolitan centers, and second, 'planned acculturation, which is the result of programs of planned culture change developed to upgrade the standard of living of a people and to integrate them into the national social, economic, and political structure. The first has been occurring through the many years of outside contact and influences, the second through the Patrimonio programs. Both processes are still operating and of importance in Tasquillo.

Since one of my interests in anthropology is related to education and resulting social change, I had hoped to study, if feasible, youth aspirations for the future, parents' aspirations for their children, and if these ambitions and aspirations had changed significantly in recent years in terms of acculturation and the desire for upward mobility. I also considered the role of the teacher as a possible agent of change. These and several other possible questions were formulated roughly before reaching the field situation. An event of some importance occurred during my first evening in Tasquillo, an event which determined the direction the study would go and gave substance to at least part of the above formulated problem. In the course of the study it underwent modification and change, but the basic focus remained the same, and it was possible to direct questioning and receive information in terms of this problem from the beginning.

This event was the occasion of the <u>clausura</u> (literally, 'closing') of the <u>secundaria particular</u> (private secondary school), i.e., the ninth grade graduation ceremony. What made this occasion doubly important was the fact that it also marked the actual closing up of this school, for future graduates would henceforth all emerge from the <u>secundaria federal</u>, or government secondary school, now in its second year of operation in Tasquillo. This was the culmination of eleven years effort and an event of such importance that it was marked by the presence of the governor of the state of Hidalgo, many of his cabinet officers, and high officials in the state Ministry of Education.

To understand the significance of Tasquillo's having its own secondary school at all, it is necessary to have some knowledge of the Mexican educational system in general. School attendance is not compulsory because many of the rural areas lack both schools and teachers; however, where schools are available, parents are strongly urged to send their children. Primary school begins at the age of six and consists of grades one through six. In the rural indigena-populated areas, where the importance of education is not realized or understood, there is a great

deal of absenteeism and the majority of those children who enter grade one do not reach grade six. In the Mesquital Valley in 1967 statistics show 14% reaching grade six, a jump from 7% in 1960 (Fuentes 1967:80). For the majority of young people in the rural areas of Mexico, completion of primary school, if they manage to get that far, marks the end of their scholastic career. One of the primary reasons for this is that there is usually no secondary school near enough for convenient attendance.

After primary school come three years of secondary school, grades 7 through 9. Normally the students must take a qualifying examination before acceptance.[3] Secondary education until recently has been primarily an urban phenomenon closely linked to the urbanization process and has been the privilege of a small minority (Solari 1967:460). In 1960 only 12% of those eligible (primary school graduates) attended secondary school, and this figure was lower in the rural areas. National statistics show that secondary enrollment more than doubled between 1960 and 1970, jumping from 351,000 to 1.5 million students (Inter-American Development Bank Report 1970); however, even with increased facilities, access to secondary education is rare for the majority in the rural setting.

Following secondary school, several possibilities are available for those who wish to continue their education. Again qualifying examinations must be taken and again facilities are limited in the rural setting. The students may enter preparatoria, grades 10 through 12, which is considered preparation for university entrance; or they may try to enter one of the vocational or professional (teacher training or normal schools) schools. These will be discussed in more detail later in the paper.

Tasquillo's private secondary school was formed through public demand in 1960. Prior to that, the nearest secondary school was in Ixmiquilpan. The school was achieved by community interest and lobbying by Tasquillo citizens and teachers in Pachuca at the State Office of Education, and was the first step toward eventually gaining the federal school. The need for primary schools is so great throughout rural Mexico that in order to have a secondary school, the townspeople must take the initiative and make the first move. Although technically a private school, Tasquillo's secundaria was heavily funded by the state and federal governments, with only part of the financial burden borne by the town itself, and by a monthly fee from each student. Continued interest and increasing enrollment led to the formation in 1969 of the government secondary school with the 1971 graduating class the final phasing out of the private school. The achievement of this secondary school, then, could not have been accomplished without first the interest and combined effort of the townspeople. This explains the importance of the occasion and the presence of the governor for this particular graduation ceremony.

During the rather lengthy program and speeches, there was ample opportunity to observe both the graduates and the audience. The traditionally dressed, indigena-appearing people far outnumbered those wearing Western dress by at least two to one. In contrast, the young graduates were dressed similarly, in modern fashion, thus eliminating any outward signs of differences in acculturation. The boys had short hair and wore dark shoes, dark slacks and sweaters, with white shirts and ties. The girls wore white dresses of varying miniskirted lengths, with their

hair hanging loosely or piled elaborately on top of their head. There were no braids, no huaraches (sandals), or other elements which to a mestizo Mexican generally means 'indio.'[4]

The prevalent theme of the various speeches is important in understanding the attitude of the people toward education and influences relating to the formation of these attitudes. Before the ceremony began, the master of ceremonies (one of the teachers) several times urged the audience to give warm applause to the important people coming to thank them for their help and interest in aiding the people of Tasquillo to have their own secundaria.

In his opening speech, he spoke of the significance and importance of education for advancement and progress, thanked all those responsible for the success of the school, said there had been great improvement in the quality of the students since the formation of the secundaria and that many Tasquillo students were now going on for higher education. The same theme was expressed throughout - the local people emphasizing the aid and cooperation of the state officials, the state representatives stressing the interest and support provided by the people of Tasquillo. The governor, in his closing speech, encouraged the students to continue their studies, saying that the road to dignity was through knowledge and study, that all men are useful and worthy to the nation and that study is the way to exceed and surpass what is happening in and for Hidalgo. He emphasized at the end, with stress on the underlined words,

> "You do not have the right to fail, you have the right to succeed, and great opportunities to improve your country and yourselves."

The Study

As mentioned previously, there are many teachers in Tasquillo. Those I met were interviewed as parents as well as educators in order to find out what they expected of and hoped for their own children and to learn something about the educational system in general. I also wanted to know why there seemed to be so many teachers in Tasquillo, since this was something that was mentioned so often by so many, without any questioning on my part. The answer invariably given was as follows: "Agriculture is the most important thing here, but there has never been enough land or work to keep everyone occupied. The people of Tasquillo have always had the desire to learn and to study, and so when the internado (government funded teacher training school) at El Mexe was formed, the people took advantage and went in great numbers and through the years have continued to study and to improve themselves." Another reason for choosing a teaching career was that it was the shortest and easiest course and so the fastest way to move upward on the social and economic ladder. This still holds true today. The important factor about the internados is that all student expenses are paid, including books, tuition, board, room; and upon completion of the four year (formerly three) course, the government places the students for a minimum of one year in a rural school. This is considered a period of social service during which time the teacher is expected to make a community study and write a thesis which then grants him the title titulado. When he is titulado he earns more and has a degree of more status.

Most of Tasquillo's teachers are not titulado. This simply means that they fulfilled all requirements except the thesis and so do not earn as much money. All placement of teachers after this first year is the responsibility of each state's Office of Education.

Each state has its own internado, or normal school and some have more than one. Hidalgo has only one and El Mexe is now for males only; the girls must apply to schools outside the state. To enter any of the internados, it is necessary to take a qualifying examination. Even if one passes a certain standard, this does not guarantee acceptance. On the contrary, with thousands of yearly applicants for a limited number of places, (approximately 300 at El Mexe) the majority cannot be accepted. When Mexe was formed some 35 years ago, the faculty came looking for students to fill the classrooms. The situation has changed drastically since then. With a rapidly growing population, a population eager to take advantage of the benefits education has to offer, Hidalgo still has only one normal school and cannot possibly accept all those qualified students who wish to enter. This is a situation common to all of Mexico, not just to Hidalgo.

In speaking with parents in the cabecera, with an educational level ranging from the normal school to non-completion of primary and an occupational range including teacher, merchant and farmer, all wished for their children to continue studying after secondary school and many had children already in advanced studies. Five of the teachers commented that the children of profesionales (teachers) are now trying to go a step further than their parents into other more prestigious careers and the parents wish this for them also. They consider this the natural next step. In this regard some of Tasquillo's young people are now attending the Instituto Politechnico Nacional in Mexico City, where they are studying for careers in architecture, chemistry, and engineering. These are five year courses; but El Poly, as it is commonly known, also offers three and four year técnico studies to prepare well qualified electricians, radio and mechanical and other technical experts. El Poly, like the internados, is geared to attract the rural student. Tuition fees and materials are provided, but unlike the internados, board and room is not. The students must find and pay for their own accommodations, which rather effectively prevents a certain segment of the rural population from attending. All of the Tasquillo Poly students lived with close family relatives in Mexico City. Unfortunately most of the more indigena people do not yet have extended family links in the urban areas. Again a qualifying exam must be taken, and again the number of applicants far exceeds the number of spaces available.

All of the cabecera parents and teachers interviewed agreed that the formation of Tasquillo's secundaria in 1960 directly stimulated interest in pursuing more advanced studies. Prior to this time, secondary education was a luxury for the privileged few, and only the more well-to-do families were able to send their children to secondary school. These students usually went to Mexico City, where they were able to live with relatives. Tasquillo's secundaria, even though private, placed three more years of school within the reach of almost all who completed primaria. This plus continued association with their peers plus increased dissemination of the communications media and resulting awareness of what is happening nationally have all been prime factors in influencing attitudes and ambitions.

These cabecera parents were all found to be ambitious for their children and prepared to aid and encourage them to continue with some kind of higher education, and they seemed quite confident that they would succeed in this.

The picture changed when I went to speak with families in the four surrounding more traditional communities. Each has its own primary school, but only one is complete and has all six grades, one has five, and two have four. For the other grades, and for secundaria, the children must come to the cabecera. The parents here were engaged primarily in more seasonal type agricultural or construction work. Some farmed their own small plot and worked also for others, some farmed a medias, and some were day laborers of various types. Many of these more indigena people wished their children could continue their education but appeared resigned that they would not. The children of these people, however, did not appear nearly so resigned; on the contrary, they seemed determined to study or work with the idea of continuing their studies later. In the most traditional families, however, when a child finished primary school, he is considered old enough to be an economic asset to the household and necessary to extend the family economic base. Additional schooling in such cases is not encouraged. It was repeatedly said "Somos pobres, no hay posibilidades," - "We are poor people, there is no chance for our children to continue." When I reminded them of the internados, they were aware of their existence but still said, "It would not be possible." I later found out why.

Before beginning to interview the students, I spoke with graduates from previous years to find out what they and their classmates were doing. This was very informally done, but I was told that 'all' the students who graduate from secondary school have the desire to continue, and if the desire is strong enough most eventually manage to do so in some capacity even if it means working for a few years first to earn enough money to go to a secretarial or business school. What working outside the Tasquillo area involves first is to have relatives in Pachuca or Mexico City where one can live. Most of the cabecera people have at least one or more family members residing in these urban centers; most of the families in the surrounding communities do not. This is one of the major distinctions between those who can and those who cannot successfully manage to leave the area in order to work or study. One informant, a 1970 graduate now attending a federal normal school in Oaxaca, said that most of her graduating class had begun some type of higher study, but that many had dropped out either for economic reasons or because the work was too hard or they were too lazy to study. She estimated that half of her group were still in school.

After getting first what I considered a cross-sectional view of attitudes toward education, I felt ready to interview the graduates, and had formulated the following major questions.

What do you wish to do this coming school year? Where?
Why have you chosen this career? (or work?)
What do your parents think about what you wish to do?
Where would you like to work when your studies are finished?
If you cannot enter this year, what will you do? Where?
What are you doing this summer?
How old are you?
Where were you born?

Where were your parents born?
What is your father's occupation? Mother's?
How many children are in your family?
How many are older? Occupation, educational level, where residing now?

There were more questions but these are essentially those concerned with this paper. Through these questions I hoped to find out not only what the individual students hopes and ambitions were, but also about possible influences from other family members, particularly older siblings, if there seemed to be evidence indicating a tendency toward emigration out of the area on the part of the young people, and also if I could discern any visible or obvious changes from the recent past in terms of what the young people are choosing to do. I also wished to know if the students from the more indigena families had ambitions similar to those more acculturated and if opportunities to continue appeared equal for both.

There were 55 graduates, of whom 20, or 37%, lived in the outlying communities. I was able to locate and personally interview 45 of these students, 16 from the outlying communities, which is about the same ratio. Of the number interviewed, 28 were boys and 17 were girls. I had originally hoped to visit each student in his own home in order to observe living conditions and level of acculturation; in most cases this was possible, but not always.

The students ranged in age from 14 to 21 years old, as seen below.[5]

Age	14	15	16	17	18	19	20	21
Number	5	8	11	13	4	1	1	1

The oldest, Enrique, already had a job in Tasquillo's irrigation office and had no plans for further education. Of the rest, without exception, all wished to continue studying; and of this group, only four, because of finances, were not planning to continue at this time. One girl hoped to work with a friend in a china factory in Mexico City. The other three, two girls and one boy, had each applied to the Patrimonio to become rural teachers in the Promotores Culturales Bilingües program,[6] but none had been accepted. Since jobs are extremely difficult to find in the Tasquillo area, one girl plans to repeat the last year of secundaria and continue trying to get into this program during the coming year. The other girl will help her family by making costales (native handicrafts) in the home, whil the boy plans to go to Mexico City to work and save money, hoping that later he can find some kind of work closer to home through the Patrimonio. With the exception of Enrique, none of these young people lived in the cabecera, but were from the more traditional and economically poorer outlying communities, and three out of the four had only one parent. There was little encouragement within the family for advanced studies, and only one older sister in this group had continued her studies and was now in her third year of normal school.

Four other girls had plans that did not include lengthy professional studies. Two planned to go to secretarial school in Ixmiquilpan, one hoped to study practical nursing there and work at the same time; while the other hoped to go to Mexico City to study to become a social worker.

The other 35 students, or 80% of the group seen, all hoped to enter either El Poly or one of the internado normales for teaching, El Mexe for the boys and Tlaxcala for the girls. Only one of this group planned to go to Preparatoria in

Mexico City, with the goal of entering the University to study law. Twenty students planned to take the entrance exam for Poly and 25 for Tlaxcala and El Mexe. There is overlap here because some students planned to take the qualifying exams for both schools, hoping to be accepted in at least one.

A methodological note is in order here. After the first two days I was surprised to find that all the students so far interviewed wanted to do the same two things, either go to El Poly or to one of the teacher training schools. What I realized at this point, after interviewing some 20 students, was that I was not learning what I really wished to know. I was after aspirations but I was not asking for them properly. I was asking what they wanted to do this coming year and they were telling me; but what they really were saying was that, "I want to go to El Poly or to El Mexe because this is what I can afford and what is available to me economically." If I had not been in such a hurry to locate everyone, and if I had analyzed sooner the data and other clues given me I would have realized where my questioning was inadequate. I then added another question, "If money were no problem, and you could choose any career you wished, what would you choose to do?" This was only asked of 20 students and was difficult for many of them to answer. They are basically very realistic and practical young people and know which doors are partially open to them, and that it takes effort and luck to get inside even these; thus it was difficult for them to think in terms of other possibilities. The majority said they would choose the same career. Some said that after they had their teaching degree they could then study for something 'better.' Two of those who cannot continue because of finances would like to be teachers, a third would like to study music. Three boys hoping to enter El Mexe would prefer to study engineering. One of the girls going to secretarial school would prefer to be a <u>secretaria bilingüe</u> (bilingual secretary) - this seems to hold more status than an ordinary secretary - or preferably a teacher. The girl who plans to become a social service worker would really like to be a physical education teacher. Since this question was asked of only about half the students it perhaps is not an adequate sample; nevertheless, it indicates no very great difference between what they hope to do and what they really would like to do.

This basic realism extended to the question about where they wished to work when their studies were finished. They all initially replied, "Where I am sent," or "Where I can find work." In attempting to determine where they would <u>prefer</u> to work if they had a choice, eight said they would like to work nearby, only one said in Tasquillo itself, the others said elsewhere. Since in most cases there is no choice involved and the students are aware of this, I believe these answers are perhaps not indicative of their true feelings. I spoke with many older students and with relatives of Tasquillo families who came to visit for a few days during the summer, and the majority said they would much prefer to live in Tasquillo if good jobs were available there. Their reasons are that Tasquillo has a better climate, a slower living pace, it is safer and better for children to live in the country and is just generally a more pleasant place to live than the large urban centers. Some of these people plan to come back to Tasquillo to retire. It would seem that people leave Tasquillo out of necessity rather than by choice.

Taking the questions in order and summarizing briefly, the students hoped to enter El Mexe or El Poly because it was economically feasible, and this was the easiest and fastest way they could begin realizing their aspirations for upward mobility. The parents were invariably pleased, although the more indigena remained pessimistic about possibilities. They would work where jobs in their field were available or where they were sent. If they were not accepted in the school of their choice this year, 30 of the 35 planned to either work or study in a preparatoria or both. Five were not sure what they would do; but all planned to take the exams again next year. During the current summer, the majority were helping their families in the home or in the fields and half said they were also doing some studying, hoping to do well on the exams. Only five boys had jobs, and only two of these were on a full-time basis. All but 3 of the 45 students were born in the community where they now live, and those 3 were born in Mexico City. Of 72 parents questioned, 64 were locally born, 6 were born in other municipios, and only 2 were born outside the state of Hidalgo. Information on the occupations of 62 parents show the following male occupations: 5 professionals, all teachers, 9 agriculturalists, 7 day workers, 3 chauffeurs, 3 merchants, 2 carpenters, and one each in an office and a bakery. Of the women, 22 are en casa (housewives), 5 make costales, 3 are merchants and one is a teacher. Few of these completed primary school. There are 86 older siblings; only 15 or 17.5% live locally and half of these are married sisters. The other 82.5% live scattered from Chiapas in the south to Baja California in the north. Of these, 37% are either teachers or engineers and another 6% still hope to continue their education. The above figures indicate a higher level of education reached and more professionalism among the children as compared to their parents. The residence figures also indicate a high percentage of emigration.

What I also learned, something that was not part of my questionnaire, was that the majority of the students did not expect to be accepted in either Mexe or Poly on the basis of their exams, but that it is necessary to know someone with influence who can help in this situation. This fact was elicited by the casual comment on my part early in August, "So much depends on the exams, the students must be getting very nervous waiting to take them." My informant looked at me in surprise and said, "No, no one ever gets accepted from the exams, you have to know someone or pay someone who has influence who can help you." This was the way both she and her brother had entered normal schools in various parts of the country. They had not had to pay, but a licenciado (lawyer) has helped them out of friendship for her father. She named several others who had entered in this manner, which I checked out and found to be true.

Still believing that perhaps this happened in a minority, rather than a majority of cases, I spoke with four highly respected and knowledgeable educators in the town, all men I felt I knew quite well and whose word I could rely on. I explained fully what I had been asking the students and why and what they had told me and the conclusions I had reached on the basis of their information.

The first conclusion was that the students in reality have no choice of career but rather must take advantage of the limited possibilities available to them.

The educators agreed without exception. They said the young people choose what is available and after achieving this, they may later try to continue studying for the real career of their choice. In actuality, many do not want to be teachers but hope to use the title as a base or stepping stone to something else.

The second major conclusion was that in theory, opportunities are equal for all, but that in reality they are not, due to the necessity of knowing someone with influence in order to be accepted in a government school. Here too they agreed that unfortunately this is true. There are too many students and not enough schools. Influence is needed and often it is necessary to pay for this. It is escondido, a hidden thing, but it very definitely exists. Generally speaking, los recomendados, the recommended ones, are selected first, then finally those with the highest test results. The poorer people, the more indigena, do not know the right people and so do not have the necessary influence and do not have the money to pay for favors; thus opportunities for them are not equal. It was also agreed that because of the stress in secundaria on the value and importance of a good education for development and progress, the students quite naturally graduate with a desire to further their studies; unfortunately however, because of the system many cannot. "We are trying to resolve this, but at this time it is not possible." The man who said this, a recently retired principal of a local primary school and a former mayor of Tasquillo, served as class advisor for this year's graduates. He sadly admitted the difficulty of advising when aware of the whole situation and what the youth actually face in their efforts to get ahead. He went on to say, however, that there are alternatives for those really determined. Private trade schools and private business schools have schedules which allow a student to work and study part time. It is more difficult and the results are not as immediately beneficial, but if a person is seeking upward mobility, it is at least a beginning.

Summary

The survey was not totally valid for a number of reasons, the primary being that this was my first experience with anything of this sort, and because of the time limitation I did not stop to analyze what was happening until I was nearly half finished. By then I did not have time to return to re-interview. There were other factors too. I had initially hoped to interview the parents as well as the students but found this seldom possible since the fathers were generally away from the house working, so of necessity I concentrated on the students. Some interviews were naturally more successful than others. For example, I found it impossible to successfully interview a student in the presence of his parents. When I had been invited in and explained what I was doing, the parent nearly always stayed right beside the student and often did most of the answering. In the few instances where I was able to speak with the student again under more ideal circumstances, the situation was more relaxed and at times a whole new picture developed of what the youth really wanted to do. More control was needed in the interview situation, and this I would provide for another time.

The interviews were generally informal and we talked of many things, although I always tried to ask the survey questions first. I kept a card on each student

where I took down the information immediately as I received it, referring to my own set of questions. In spite of this, I at times neglected to ask one of the questions. In another field situation with a similar survey, I would, if possible, have the questionnaire duplicated on each card, or a number system matching the questionnaire which would immediately show me which questions I had asked or failed to ask. This would make for greater accuracy.

There was sometimes hesitation on the part of the students when I asked the occupation of their father. I noticed this at the time yet did not question it. For example, agricultor (farmer) sounds better than jornalero (day laborer), so I question now whether the occupations as given are completely accurate. I also did not always ask some of the questions in exactly the same way. I asked, "What are you going to do this coming school year?" or "What do you think you are going to do this coming school year?" or "What do you want to do this coming school year?", and sometimes I asked it all three ways. Often a rephrasing is necessary for understanding and also to draw a person out, and although I do not think this particular factor affected in any way the nature of the information I was seeking in this situation, in another survey it might be of utmost importance to consistently ask something in the same manner. As mentioned in the beginning, this was a learning and experimental situation and I learned a great deal, especially from my errors and by considering later other possible ways of handling the situation.

In spite of the above, on the basis of the information received and cross-checked and verified by later readings, (Ruiz 1963; Lewis 1960; Tannenbaum 1962), I believe certain patterns can be seen and fairly accurate generalizations made. There is a dearth of information and statistics on secondary education in rural Mexico for two reasons. First, secondary education is relatively recent phenomenon, and second, the emphasis has necessarily been upon providing primary education first. There have been no surveys to my knowledge, at least in the Mesquital Valley, on secondary students, what they do upon graduation, the careers they choose whether they complete these studies, and where they go from there. In Tasquillo, however, the older students, current graduates, parents and teachers all seem to agree that once a student has completed secundaria, he does have the motivation and ambition to continue his schooling and the goal to move upward mobilely. This desire has increased markedly since the formation in 1960 of Tasquillo's own secundaria. The careers chosen are those that are most realistically attainable. The major change in the last five years is the increased number who are seeking a technical career of some kind, rather than a teaching career. It is considerably more difficult for the children from the more indigena background to become accepted in one of the federal schools due to a lack of contact with influential persons who may help them. Opportunities, then, cannot be said to be equal. The statistics given on the whereabouts of older siblings indicate a tendency toward emigration out of the area on the part of the young people. This is supported by the figures below and offers a possible further avenue of research.

In the ten year period from 1950 to 1960, Tasquillo's population grew 1.98% and from 1960 to 1970, 1.2%, both figures considerably lower than the Mexican national average of 3.5%. The municipio birth and death figures, averaged for the last five years, show 455 annual births against 167 annual deaths. Since birth

figures are more than 2½ times higher than deaths, yet the population increase is relatively low, this does argue for emigration. What is necessary is a breakdown by age of the present population to indicate whether the resident population consists primarily of the younger school-age group and the older settled and lesser educated population.[7] From this, predictions could be made on future trends in Tasquillo in terms of growth, viability and primary needs. That this kind of future planning is essential, not just in Tasquillo but in all of Mexico, is obvious from the August 31 headlines of La Prensa, a major Mexico City newspaper, at the beginning of the 1971-72 academic year...La Educación, Desorganizada Denuncia: Maestros sin trabajo y miles de niños sin escuela... Translated simply, this means that the educational system is not well planned, that there are teachers without work and thousands of children without schools. The construction of schools and classrooms has not kept up with the population growth, while the training of teachers has now exceeded the demand in terms of classrooms available in which to teach. A meeting of the state governors in Mexico City on August 30, 1971, (El Universal: 5) stated the need for better educational planning and coordination between nation and state and that there must be a reorientation of thought, that the children of the farmers and workers must be offered education for diversified work, according to the labor market and regional requirements. This is a major problem in Mexico today. The national economy cannot absorb either the skilled or unskilled workers available. Thus there are two major periods of frustration facing the secondary graduate at the moment. The first is when he attempts to continue his education and finds he cannot, the second comes for those who do manage to continue and graduate with a skill and find themselves unable to find work to utilize this skill.

It is interesting, and disappointing, to note that by the time I left Tasquillo not one of the students had been accepted at either El Mexe or Tlaxcala, the teacher training schools. This included a number of secondary graduates from former years who were repeating the exam. The results from the Poly exam were not yet available. Those who had contacts with influential persons were now utilizing those contacts in the final and seemingly most important step in the entrance process.

This study suggests numerous further lines of research. One already mentioned was the examination by age of the cabecera population to determine future trends in terms of emigration and social and cultural change and town planning for such exigencies. Studies of other communities in other municipios would be useful in a comparative approach to this same problem, and would be useful in determining similarities and differences in what the young people in these other localities hope to do in the future in terms of this particular study. It would also be of interest to find out if Tasquillo really does have an exceptionally large teacher population in relation to other cabeceras or larger towns of the state.

It is important to note that this study in Tasquillo has covered less than half the municipio population. The graduates this year come form six different communities. What are the young people from the other 18 communities and dispersed settlements doing? What educational level have they reached? What are their plans for the future? Where do they fit into the local, state and national picture in terms of future development? These are only a few of the many questions raised

in the course of a study of this type that could offer meaningful avenues of research.

Notes

1. Farming "a medias," or "in halves," is when an individual farms land belonging to someone else, owner and farmer sharing equally in the derived products.

2. Public Law 78, which authorized the admission of Mexican nationals into the United States for temporary employment, expired December 31, 1964, thus terminating the Mexican Labor Program.

3. Ideally secondary education at a federal school is available for all those who wish to attend. The qualifying examination is given when overcrowded conditions exist, and then only the better students are accepted. Tasquillo's secundaria is not yet full to capacity. The only examination presently given is for placement of students in academically homogeneous groupings for more effective teaching and learning.

4. Later, in visiting these young people in their homes, none wore any kind of traditional dress, even when both their parents did. There was a great contrast in style. The young people wore only what I would call modern dress wherever I saw them, in whatever activity.

5. The disparity in age range of the graduates is due to several factors. Not all children enter school at the age of six, and it is quite common for schooling to be interrupted because of illness, economic problems, or other family difficulties. It is also very common to repeat a grade. Statistics for Hidalgo in 1960 show 27% of the students repeating one grade, and 10% repeating two grades.

6. The Promotores Culturales Bilingües is a program designed by the Patramonio to teach Spanish to monolingual pre-school and primary school Otomi children in the dispersed settlements in order to ease their way into the federal school system and integrate them into the national culture.

7. These figures may be available when the 1970 census figures are published; unfortunately they were not accessible when the study was made.

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A CASE STUDY OF A CATHOLIC YOUTH ORGANIZATION IN A PROVINCIAL MEXICAN TOWN

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Este artículo describe la estructura y funcionamiento de una organización juvenil católica en una parroquia provincial. El sacerdote que la organizó se identifica con la corriente renovadora de la iglesia y no con el catolicismo tradicional local. Segun él, la razón de ser del grupo, es la formación de jóvenes comprometidos a luchar en favor de la justicia social. La organización funciona con un mínimo de estructura formal a base del liderazgo carismático del sacerdote. La enseñanza ideológica se lleva a cabo en formas modificadas de retiros espirituales tradicionales y en misiones religiosas que permiten un contacto personal con los pobres.

No fué posible llegar a conclusiones definitivas sobre el impacto de esta organización en sus miembros. Sin embargo, los datos sugieren que la realización de la meta de la organización está impedida por su dependencia estructural a los elementos conservadores de la comunidad. También, influye el hecho que muchos jóvenes estudian fuera del pueblo y están expuestos a ideas contradictorias con las de la organización. Actualmente, la participación en este grupo juvenil parece mantener la lealtad de los miembros a la iglesia institucional y su fe en un cambio ordenado y progresivo de las estructuras sociales de México.

The apostolic youth organization, Grupo Apostólico Juvenil, upon which this essay will focus, was studied during a six week period of anthropological field training in the summer of 1971 in the Mezquital Valley, Hidalgo, Mexico. It was chosen as a research focus because it seemed to me to represent an individual attempt to shape the process of change which is affecting Mexican young people today. The group was also interesting because it was the only voluntary association for young people in the town which was able to function in a disciplined and organized manner while actively involving the majority of its members. The rest of the town's young people either have no group affiliation beyond school, work, and family or they belong to recreational and social groups which exist primarily on paper and meet only sporadically. This is, of course, in keeping with the fact that voluntary associations of the type which characterize middle class groups in various parts of the world, are relatively new patterns of social organization in provincial Mexican towns.

The town in which the research was carried out was a cabecera municipal (county seat) of some 15,000 population. Agriculture and commerce are the principal means of livelihood for the residents. The importance of commerce is due in part to the location of the town on a major international highway and also to the existence of a sizeable weekly native market which draws people from the surrounding regions. Also there is practically no industry, a fact which is locally explained by the lack of good drinking water in the region. Some recent efforts by the local merchants and government people have been made to promote tourism.

The townspeople define themselves as mestizo or mexicano. They define the people of outlying rural districts as Otomi or mestizo depending on the village,

but in fact there is no clear dividing line. To the inquiring stranger, they explain that there are three socio-economic categories by which they rank themselves in relation to one another. At the pinnacle of the social pyramid is a small group of families of Lebanese, Spanish, and Mexican origin. Their wealth is based on large agricultural or commercial properties within the municipality. Beneath them in prestige are professionals and small and medium size agrucultores (farmers) and comerciantes (merchants). Finally, there are the poor, the gente humilde who may do day labor or sell local produce or handicrafts in the native market. The youth who belong to this last socio-economic group seldom achieve higher educational levels. They are projected into the business of adult living very early and do not have that longer period of adolescence which characterizes the lives of many youth from middle and upper level families. The membership of the grupo apostólico juvenil is drawn from these middle and upper socio-economic levels of the town.

The facilities provided by the town for higher-level studies toward a profession or technical specialization are inadequate to meet the educational aspirations of the young people. There is a day and a night school at the secundaria level and a small preparatoria opened since 1967, but many youths can be found who go to the state capital, Pachuca for preparatoria studies. A private Catholic colegio, founded by nuns some 15 years ago, offers the opportunity for secundaria as well as commercial courses to a very small number of adolescents, principally girls. Because the opportunities for higher studies are few and the possibilities for practicing certain professions such as engineering or business administration are exceedingly limited, ambitious youths are forced to migrate to a state capital or to the federal district in search of a university education or a job. Many return periodically. Only a few return definitively to the provincial town of their origin once studies are completed, although, in my experience, they usually express a preference for doing so. These are the ones who frequently express a general dissatisfaction with the level of development of the town, particularly in the spheres of economic and general cultural activities.

There are a few organizations which might be categorized as voluntary associations for the adolescent. The Activo 20-30 is a prestigious extension of the Lions Club which sponsors dances and social events; members are mostly single adults in their twenties from the most high ranking families. A few youths are drawn into the Masonic Lodge in Pachuca. There also exists a club of some 40 adolescents from families of the lower portions of the middle socio-economic level. This club, however, seldom has meetings and is largely non-functional, except on certain occasions when a few of the members are organized to help in fund-raising activity or a theatre production put on by the municipal government.

Of the religious associations in the town, most function only on certain religious feast days when a procession or pilgrimage is to be organized. The principal exception is the grupo apostólico juvenil. It manages to hold a regular series of meetings and activities, and continues to function throughout the year despite the fact that its membership is drawn from among the town's most mobile youth. The majority of members who are away studying, return to the town only on weekends during the academic year.

The Background

The original nucleus of the present apostolic youth group was formed at a series of conferences held at the local parish by a group of Catholic University students from Leon, Guanajuato in the summer of 1969. The conferences held talks concerning the problems of youth discontent, drugs, and sexuality. During these conferences, which lasted two weeks, some of the youths of the parish developed personal friendships with the Guanajuato youths which led to an exchange of visits and correspondence. In order to achieve the objective of establishing a local youth mass, these young people obtained permission directly from the Bishop in December of 1969. At about the same time, these youngsters formed a Club-Juvenil which sponsored dances, parties and similar social functions with the intention of raising funds for the purchase of electrical musical instruments for the mass. The instruments were purchased but were in use for only a couple of months because there was a conflict about whether the band members should be allowed to use the instruments at private functions for profit; the band members separated from the club and the instruments have remained in disuse since that time.

Prior to the arrival in the summer of 1970 of the young assistant priest (Padre Vicario) who is responsible for the constitution of the apostolic youth group in its present form, the key members of the then-existent club were invited by the parish priest (párroco) to attend a series of three day retreats for Christian formation. These retreats, known as Jornadas, were held in a nearby town for boys and girls from all over the diocese. They in turn led to the organization of retreats in the local parish. This second set of Jornadas, held in August 1970, coincided with the arrival of the padre vicario. The retreats generated so much enthusiasm for Christianity that the key members of the social club approached the recently arrived priest to ask his help in working out a plan to do something to help others. Out of his suggestions to hold a series of meetings and discussions during September 1970, the present apostolic youth group has developed. The young priest refused to associate himself with the then existent Club Juvenil since its activities were purely recreational, except for the young people's mass. The membership of the two groups overlapped until the dissolution of the Club Juvenil in February 1971 because its functions had been gradually absorbed by the Grupo Apostólico Juvenil formed under the direction of the young priest.

The Grupo Apostólico Juvenil has a current membership of 48 youths, 29 of whom have been members of the group since its beginning in September 1970. Ten of the members are from Lebanese-Mexican families, the rest are Mexican. There are extensive ties of kinship between the members of the group. The membership of the group is evenly divided between boys and girls. Their ages range from 13 to 28, with 85.4% between the ages of 15 and 20. The boys tend to be somewhat older, and have more years of formal education than the girls. More than half of the girls no longer study; those who have completed only secundaria stay at home or work in local commerce. Those with higher educational levels are secretaries and primaria teachers. Seventy percent of the membership have studied beyond the secundaria level. More than half have studied or are studying at a university either in the state capital or in Mexico City. There are only two males who are non-students,

the priest himself and a 28 year old worker who was on the verge of migrating to Mexico City at the time of this study.

Organization

Since many of the members leave the town to study and work during weekdays, the principal group activities must take place on the weekends. Every Saturday afternoon at 5 p.m. there is a meeting of the group in the house of the padre vicario followed by the youth mass at 7 p.m. at the church. These meetings usually begin with a prayer, after which the padre or some member propose problems for resolution. The group discusses the problem, decides on a course of action and assigns specific tasks to be accomplished in the coming week to individual members who volunteer to undertake these specific tasks. Evaluation of past activities, and conjecture on future activities form an integral part of the meetings, which may also include an informal talk given by the padre or some visitor on some aspect of religion in society. Similarly, the youth mass includes a homily which emphasizes the relation of the individual (youth) to society and religion. The mass is celebrated by the padre vicario in a simple form, and accompanied by folk music and guitar playing led by members of the Grupo Apostólico Juvenil. Although other people in the town may attend the Saturday evening youth mass, the majority of young persons at the mass are members of the group.

The group has never had an official charter or set of offices, because the democratic ideal set forth by the priest-director of the group is full participation for as many as possible. New persons wishing to become members must be accepted by the whole group in a vote prior to entry. There is a theoretical minimum age of 16 now in force, since it is felt that the younger members tend to be more irresponsible. However, persons younger than 16 may be admitted if the padre and the group as a whole consider them sufficiently mature.

The organization of meetings and other activities is accomplished by a coordinating and planning committee called the Grupo de Formación. The original committee was voted by the whole group in October, 1971 and it consisted of three girls and two boys. One of these girls, also serves as secretary of the whole group and, during periods of minimal participation, she has fulfilled all the responsiblities of the entire Grupo de Formación.

In addition to these Saturday meetings, the group also engages in formal and informal activities which vary from week to week and month to month. From time to time, a special service to some group related to the parish is carried out. Thus, the group participated in the anniversary celebrations organized by the municipal government during July, 1971 by arranging a Kilómetro de Veintes to raise funds for a library; they also participated in the public anniversary celebrations of the Catholic school. At the request of the parróco a few members have formed a preteen apostolic group which gives a catechism class to children in an outlying section of the city.

During the Christmas vacations of 1970, certain members organized posadas, special Christmas parties for the poor children of the parish. And during Easter week, the whole group acted out a living passion play on the streets of the town

commemorating the sufferings and death of Christ. Occasionally a Kermes, a movie at the local theatre, or a dance are sponsored by the group in order to raise funds for major activities. Every few months there is a day of reflection to evaluate group functioning in terms of stated objectives and to further individual formation in christian social ideals.

At any given moment, there is also likely to be a major activity such as a mission to a nearby community or an encuentro Juvenil (a mass youth rally drawing from various communities in the diocese) being planned, executed or evaluated. There have been two rallies and three missions in the year of the group's existence. The first rally was held in December 1970 in another town of the diocese. Nevertheless some 45 members of the Grupo Apostólico Juvenil participated. The official theme of the rally, The History of Salvation, developed the concept of man as ultimately responsible for his world before God, and the idea that creation is autonomous of its creator to some degree. The second rally was held in the community during the period of my fieldwork. It emphasized man's responsibility for the social order and his need for communication and community. There were some 250 youths in attendance. In the first rally, members of the Grupo Apostólico Juvenil were merely participants in the program; but in the second one they were involved in planning, organization of work teams, and in overseeing the actual rally. (I was able to observe and participate in both classes of activities during my period of fieldwork.)

The missions of the Grupo Apostólico Juvenil are remembered by informants as experiences of differing impact on the participants. One month after the formation of the group, after a series of retreats and lectures, the group began its first mission project in an outlying section of the town. This three month-mission was begun with great enthusiasm but, as the dicipline of house-to-house census work and teaching catechism to children destroyed the initial motivation, so fewer people continued in the project to the end. The second mission of three months is widely considered to have been a great success. It began with a three day visit by the group and the padre to a small Indian village one-hour's walk into the mountains. Thereafter, every Saturday, small groups of boy and girl catechists set off to teach the group warmly and the last day when the sacraments were distributed in the village is fondly remembered by all who participated as an occasion of great solidarity. The third mission to a mestizo village near the town failed because the villagers were hostile and suspicious and this hostility led to a demoralization of the group. The last mission, an intensive two week stay in a very remote Indian community, fared better; but in-group rivalries arose due to the fact that the priest was exacting of the group and seemed to favor two girls in the group over the others.

Both missions and rallies are highly structured activities with a careful division of labor; group evaluation of the performances assigned tasks to members guided by the priest. The daily round of activities is also highly structured - time for prayer and reflection, hours for intellectual and physical labors, rest and recreation periods, discussion and evaluation sessions. Punctuality and responsibility are stressed and shortcomings are reprimanded in the evaluation

sessions or round table groups, as well as in informal conversations.

The group also has a variety of informal activities. One such activity is nochecitas. Every time a member or someone in his immediate family has a birthday or saint's day, everyone who can goes to the house of that person to serenade them with the song Las Mañanitas and to enter the house for a small party. On the average of once a month, those who care to go to the theatre or the movies or to a soccer game, get together for such an outing. Occasionally the priest accompanies them. During the summer and on holidays when students are home from school, one can always locate a small group of apostolic youth group members just "hanging around" in the priest's den. From time to time, informal groupings of friends occur in the houses of certain popular members, and group gossip is exchanged.

There are four significant informal sub-divisions of the group, as they were described by the seven members interviewed in depth by me and confirmed by participant-observation and group interviews. (1) Those based on age and responsibility levels. The persons interviewed distinguished between those younger members who are seen as relajistas (i.e. looking for fun and sociability and not interested very much in group work) and the older members, most of whom helped in the original formation of the group and can be counted on to be either leaders or efficient workers. At each of these levels the padre has a few persons with whom he has an informal relationship through which he communicated his ideas and values and gets feedback as to youth attitudes. Recent entries to the group are either peripheral to this communication system or hook into it through friendships with persons on their age-responsibility level.

(2) Those based on sex groupings. There are informal friendship networks, based on sex through which communication is rapid. In these chains, certain girls and boys are key points. People visit their houses constantly to chat and exchange information and viewpoints on group matters. These key persons have close contact with the padre and are especially subject to his influence, and responsive to the sanction of his disapproval, anger or withdrawal. In turn, their attitudes influence the attitudes of persons within their network. There are also boy-girl friendships and noviazgos which provide some basis of communication of attitudes between the sexes.

(3) Those based on point of entry in the group. The boys and girls who exercise the greatest iniciative and responsibility in the group are generally those who have belonged to the group since the beginning.

(4) Those based on differences of religiousity and socio-economic class, but these differences could not be clearly seen to be influencing group behavior.

Goals and Strategy

The padre is a man in his late twenties with a history of personal intellectual rebellion against the traditional philosophy and more authoritarian social forms of Mexican Catholicism. While firmly committed to his Catholic faith, he is concerned as a priest with changing the ethos of Mexican Catholicism from individualism and a passive acceptance of social problems to a more communal and socially relevant form. He has little patience with traditional piety and social norms

which might limit his sphere of action as a priest, and he is indifferent to the attitudes of adults who criticize his personal style vis-à-vis local ideas of propriety. He seldom wears a cassock, but rather dresses in casual sports clothes. He approaches youth on an intimate and equalitarian basis (as a fellow youth) encouraging the use of the tu (intimate) form of address and the salutation mano (brother). With the young girls of the group, he often takes an openly affectionate but brotherly role. Since he is quite good-looking, this behavior often scandalizes his more traditionally-minded parishoners. For a couple of months, he even wore a beard, a fact which so scandalized some members of the community that his immediate superior, the parroco, insisted that it be shaved. In the activities of the group, he is usually in the limelight--reciting poetry, making jokes, speaking. In sum, he has a personal charisma which is very appealing to the young.

The padre's style reflects his general world view. He is by his own admission a man of the city, oriented to the problems of national and international society. He struggles in his parish work to understand the more traditional mentality of the local populace, but finds it difficult to achieve. His nature is strongly intellectual and aesthetic and his theological view of the world highly secular. He seeks to communicate his vision of the events of the world as autonomous of direct divine intervention but moved by the spirit of God (Love, Justice) through the will of responsible and committed human beings acting to change social institutions.

In his work as a parish priest, the padre vicario seeks as his primary goal the formation of small communities of Christian leaders who are committed to social change. He conceives of the apostolic youth group as an experience for selecting and forming a few individuals who have the potential for such leadership and commitment, and he is not interested in maximinizing the membership of the group. This explains certain features of the group's organization i.e., only youths with enough free time and a minimum age and mental maturity are eligible. The priest is interested in the capactiy of the youngsters to absorb the experiences of ideological formation provided by the group and put them into practice.

The padre feels he must compromise with the existing structure of the church in its outward forms if he is to be an effective source of change from within. Thus he suggests those activities such as missions, retreats, rallies with a specifically theological theme, which appear to parents and superiors to be traditionally religious in character. This gives such activities the religious legitimacy required to make them acceptable in the eyes of such adults. Yet in its specific content, the activity is tailored to meet the padre's objectives. Thus, direct and personal confrontation between the Indian and mestizo villagers and the relatively privileged youth of the apostolic group engaged in missionary activity is designed to awaken social consciousness. Retreats and youth encounters include elements of group dynamics and sociology, and a gospel of social justice and social change is preached. Strictly theological questions are ignored.

The specific education techniques employed in various types of activities may also be analyzed according to the objective they serve. Basic concepts of individual responsibility for one's fellows are conveyed not only through conventional teaching procedures but also by emotionally significant group work and play. In

missions, talks, and rallies the lecture is followed by round-table discussions of questions which apply these ideas concretely to the individual's personal life. Youngsters create propaganda posters transmiting an ideological message to other youths on a bulletin board in the local equivalent of a drug store soda fountain. They also participate in the writing and presentation of skits, sociodramas, songs for group use, prayers and variations in the ritual forms used at the youth mass, all of which are defined as part of their apostolic role of communicating the message of social responsibility and brotherhood to others. However, in the process of communicating these ideas to others in such a way, the individual youth comes to incorporate these principles into his perception of reality to a greater or lesser degree.

The affective content of the experiences of intellectual and ideological formation provided by the Grupo Apostólico Juvenil is a critical component in the success of these activities. Those experiences which strengthen the youth's sense of identity with fellow youths and give him support in his struggle for personal autonomy from family and school, are emotionally high pitched and result in great enthusiasm for the ideas presented during the experiences.

Missions and rallies are especially effective indoctrination situations since they provide an environment of recreation in which the individual youth is given freedom from family controls to live for a few days with other youths and share common attitudes and feelings. Boys and girls can mix socially quite freely. The attitudes of youths in these sessions are evaluated by the priest leaders as extremely important, a fact which gives legitimacy to the whole process of formation of attitudes and values which diverge from the values of parents. When the priest has tried to employ techniques of ideological formation which do not have this affective dynamic, (for example, small group Bible discussions, or missions which do not provide a sense of group adventure away from the known and familiar norms) enthusiasm wanes, participations drop, and intergroup squabbles arise.

The group activities are also educational or formative in that they train the individual in habits of group participation - such as punctuality and completion of assigned tasks, the protocol of presentation and discussion of ideas, and the practice of disciplined team work through commissions. The roles of task organizer, discussion leader, and similar positions of responsibility are alternated so that a large part of the membership has an opportunity to exercise some degree of leadership. As yet, however, the overall direction and planning comes only from the priest and opportunities for youth initiative in deciding the content and direction of group activities is still minimal. The priest claims that the youths themselves became disoriented when he gave them this freedom to suggest projects at the beginning of the group's history, so he has proposed ideas subject to their approval. Recently, the opposite pattern has begun to emerge. A few members proposed psychological testing by a visiting psychologist. The padre approved, choosing a personal friend to come to speak to the group. However, this is still a rare pattern of decision-making.

The effectiveness of formation experiences in the Grupo Apostólico Juvenil is very much related to the degree of unity or disunity present in the group at a particular point in time. In comparison to other voluntary associations in the

community, especially the other youth group (the Acatadores), the apostolic group has a relatively high degree of unity, high levels of participation and fairly disciplined group behavior. How is this relative unity achieved? Basically, the charisma of the padre and the individual young person's desire for a closer relationship with him is the social cement which binds the natural sub-divisions of the group into a single organization.

The tendency for sub-groups to exist does not usually result in group disunity, because the displeasure of the padre is an effective sanction enforcing the rules of discipline and responsibility. The padre is idolized by the girls (all the girls interviewed chose him as the person they most admire in private or public life) and for them, his approval acts as a strongly motivating force. The boys are somewhat more critical of him, but they feel and see him as a cuate (friend) as well as a priest, a fact which means that they are also concerned with measuring up to his standards of group functioning. This is a fact which is recognized openly by certain members. A group hymn sung at the end of a mission says: "You sent the Padre to motivate us and his effort is what gives a great inspiration to us, for the future." It is a common observation among the members that "if the padre is happy, the group is happy; if not, it begins to disintegrate... the day the padre has to leave here, the group will begin to go down hill."

A review of past cases of conflict which resulted in disunity in the group illustrates the critical role of the padre in manitaining solidarity. For example, on one occasion the padre was out of town for a few weeks. During this time, there arose mutual accusations between younger and older members, and between boys and girls over the ensuing lack of organization and responsibility. No one person was recognized as having the right to leadership and control. Therefore, reprimands with respect to punctuality and attendance were resented. No one had the legitimate authority to assign particular tasks, so there were failures to fulfill assigned tasks. On the return of the padre, tensions remained high. At the suggestion of two girls there was a retreat in which the padre discussed group dynamics, the need for reaching out to understand others, etc. Then there was the religious pageant of the crucifixion of Jesus in which almost all the conflicting individuals participated as actors; the emotional pitch of the team activity restored the feeling of group solidarity.

On yet another occasion, the group backed down on a suggestion of the Padre to hold small group retreats. He was offended and invited a youth group from Pachuca instead of his own organization to come give a retreat for the pre-teen set. The resentment of this action was so high among the group that members refused to have anything to do with the padre in this activity. But then, when it appeared that an external problem threatened to frustrate the padre's plans, one of the girl leaders communicated with the leaders of the various friendship sets, and all united in an effort to support the padre.

Preliminary Conclusions

The Grupo Apostólico Juvenil is still in its infancy after only a year of existence. It functions effectively in planning and carrying out a variety of activities, designed to inculcate awareness of social injustice and a commitment to

working toward a society which is more in accord with Christian ideals of a just social order based on mutual love. In working out a strategy for working with Mexican middle-class adolescents who have little or no experience with the habits and attitudes which are necessary to effective participation in a voluntary association, the padre chose a democratic structure with a loosely defined coordinating group and has had to use his personal influence and charisma as a motivation and sanction for teaching the necessary habits and attitudes (disipline, punctuality, responsibility, teamwork, evaluation etc.). The dependence of the group on the padre's personal style of leadership, however, has led to disunity when he is partial, arbitrary, or simply not present. And this in turn affects the effectiveness of the group as an educational device. Members of long standing seem to have acquired the ability to participate with initiative, discipline and responsibility and a rudimentary conscionsness of social inequality. Yet none of my in-depth interviews revealed any change in career plans or marriage plans which might reflect commitment to working for the transformation of social institutions. A few intend to try to live an ethic of Christian love in their professions or marriages, but these remain ideals rather than plans for action. The idea of living in an intimate community other than the nuclear family for the purpose of effective social action is non-existent as far as I can determine.

An unintended consequence of group membership is an increased awareness on the part of individual members of the difference between their emerging life styles and that of their elders, and a sense of solidarity with other youths as well as a new independence from the family. In the interviews, the strong desire to achieve a cultural and social level in accordance with urban standards (superación personal) was generally described as being a result of belonging to the group. Likewise, the youths commonly credit the group experience with giving them a new awareness of the generation gap and their own identity as Mexican youth in a new age. They question parental customs and restrictions and find support in their struggle for autonomy in their fellowship with other youths. By giving approval to these attitudes through the group, the Church is actually put in the position of using its traditional prestige to legitimize a break with cultural tradition.

The group serves the institutional church in at least two senses; it provides a labor force for catechetical activities in a parish with insufficient numbers of priests and nuns, and it maintains the loyalty of the participating youths to the institutional church. Without the group many would have ceased to be Catholics in any real sense. Now, although doubts remain, they have a new concept of religion which is more compatible with their basically secular world-view, and which supports them in their struggle to adapt to the new.

The padre has not, as yet, succeeded in his efforts at transmitting a basically Christian orientation of the social order to the youths. This is partially due to the fact that the group is one of many forces operating to determine the consciousness of these adolescents. It may also be due to the relative newness of the group, but it is probable that the lack of a charter and offices and officeholders also creates a leadership vacuum when the padre is not exercising his integrative role in the group.

It would be idle to speculate on the future of this and other groups. As socio-economic change accelerates in Mexico it is reasonable to expect a growth of voluntary associations in the urban setting. Further research in this area might well concentrate on the extent to which such groups are the sources and training grounds for new types of leadership; and the extent to which certain types of leadership hinder or encourage the emergence of other forms of leadership.

Appendix

1. Tables

A. MEMBERS OF THE GRUPO APOSTOLICO JUVENIL

Distribution by Age and Sex

Age Level	Male	Female	Total
13-14	0	3	3
15-16	6	8	14
17-18	9	4	13
19-20	6	8	14
22	2	-	2
28	2 (includes priest)	-	2
Total	25	23	48

B. MEMBERS OF THE GRUPO APOSTOLICO JUVENIL:

Distribution by Sex, Occupation and Education

Current Students	Males=23	Females=10	Total=33
Primaria	1		1
Secundaria	1	1	2
Preparatoria	7		7
Advanced Technical	2	2	4
University	12	7	19
Current Non-Students	**Males=2**	**Females=13**	**Total=15**
Only primary completed	1	2	3
only secondary		8	8
secondary with technical training		1	1
preparatory			0
university or normal	1 (priest)	2	3
TOTALS	25	23	48

2. Methodological Notes:

The methods and techniques employed in a study necessarily determine the nature of the analysis that can be made. My methods, the types of data to which they led, rather than present them in a lengthy discussion and some of their limitations are summarized in the chart below:

Section of essay	Type of evidence cited	Principal method of data collection employed	Limitations imposed by the method on analysis of data
Introduction	general data of the town	official data collected by city government taken at face-value	some of the information: i.e. population, economic patterns may be inaccurate.
	social divisions	interviewing of various informants	mental categories are not necessarily correlated with objective reality
	voluntary associations	preliminary interviews with partipants	superficiality
Background	group history	multiple interviews (for cross-checking) with padre and key members	- no written or other records exist. - I did not cross-check with outsiders.
	Basic data on members	membership lists at intervals of three months, interview with secretary of the group	_____
Organization	Activities especially encuentros--missions	systematic participant-observation and interviews with padre, key members	short period of observation - interview sample not completely representative
	- informal networks of communication, natural subdivisions	interviews with 7 members and priest using Q sort cards with members name on them, asking that they be sorted according to the person's judgement into subgroups. Subsequent explanation of categories.	slanted toward the view of those who participate more actively
Goals and strategies	material on ideals values of priest	life history, in-depth interviews, observation	_____
	techniques of formation	systematic participant-observation in encuentro juvenil mass, parties, meetings	analysis could have been rechecked with padre
	unity and disunity	analysis of cases of conflict as told by 7 members of group	extension of no. of cases
Other categories of information collected but not included in this paper	detailed network analysis	interview with Q sort cards	_____
	aspirations and personal models of 7 members	interviews	_____

THE MAKING OF AN ANTHROPOLOGIST: PHASE 1½

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Este papel presenta un análisis de la experiencia del autor como participante en un cursillo de verano sobre métodos de investigación utilizados en antropología. Esta experiencia se enfoca como una parte importante de la educación profesional del autor. El trabajo no está basado en datos sustantivos sino más bien en datos metodológicos, describiendo la solución a problemas que el autor experimentó como participante en el cursillo. Todos los problemas encontrados por el autor se examinan individualmente, así como cronológicamente, siempre que sea pertinente. Además, el trabajo relaciona los problemas entre si analizándolos con respecto a sus respectivas contribuciones en la formación de la experiencia total del autor. Por último, el trabajo presenta conclusiones sobre el provecho de la experiencia, así como sugerencias sobre modos de aumentar este provecho.

Introduction

This paper is an analysis and evaluation of my participation in the 1971 Summer Field School in Ethnology and Linguistics at Ixmiquilpan, Hidalgo, Mexico. Using Morris Freilich's model of field work (1969:485-594) as a rough guide, I will describe, analyze, and try to show the relationships among the "critical moments of decision," or problems, involved in my field school experience.

A regular field experience, such as dealt with in Freilich's book and a field school experience are different in kind. To begin with, their basic goals and functions are different: that of the former is to gather data; that of the latter is to provide some familiarity with how to gather data. They are also different in form and content in ways that should become clear during this analysis. Consequently, there are many points of disjuncture between my experience and Freilich's model of field work and I will be relating my experience not so much within the framework of his model but rather parallel to it, using his major breakdown of the problems as points of reference.

One's first regular field experience, unprefaced with any other field training, is frequently compared to being plunged into the deep end of the pool without knowing how to swim and being told to sink or swim. In contrast, but in the same vein as that analogy, my field school experience was more like a swimming lesson. I have divided my experience into four main stages, the headings of which will reflect this swimming lesson analogy.

Pre-Field Preparations: Conditioning

The problems that I had to solve during this stage were few.

Basic Decision

The first critical moment of decision is simply that of deciding if one can

benefit from a field school experience. Before going I was convinced that I was ready to benefit greatly even though I had had only a little more than a year of anthropological course work. When the summer was coming to an end I had almost reversed my original opinion; I thought that I should have had more course work before attending a field school. Now, after analyzing my experiences, I have returned to my original opinion. I think the only other course that would have greatly added to the benefit I derived from the summer would have been a course in field methods (something which most of the participants in the school did not have). There was another way in which I was not prepared, however, which could have been avoided.

Anthropological Preparations

The staff of the field school compiled and sent to us before departure for the field an information manual which contained among other very useful information a long section on preparations. With respect to suggestions that would aid us directly in successfully completing the objectives of the school there was offered a list of books on theory and method in field work. Pelto's Anthropological Research: the Structure of Inquiry was strongly recommended as were the books in the Spindler series, Studies in Anthropological Method. I obtained Pelto's work and read it before reaching the field, but the other books were not immediately available in my town and I made no special effort to get them. Nor did I make any real effort to borrow them once in the field. The faulty logic involved in this latter shortcoming was that I was in the field and had to get out there and "do" anthropology; there was no time for reading.

I have now read all but one of the recommended books on field methods and consider having not read them before going to or while in the field my biggest sin of omission. Not all of the books would have been useful in my particular field situation but about half of them would have aided in giving me a better insight into the various aspects of field work than I ultimately demonstrated.

As for the general culture and geography of the area of the field school, I familiarized myself with it by reading and by discussing it with a friend who had attended the field school two years earlier. This aided in the solution of the socialization problem, below.

Other Preparations

I include under this vague heading most of the things that Freilich discusses under "making plans for leaving the country." In the information manual the staff had also given many good tips about these matters. I simply followed their suggestions and encountered no difficulties. Thus, there is little that is particularly different or instructive in the way that I dealt with the various aspects of this problem.

The one problematic aspect of these preparations came out of my decision to attend the field school with my family: my pregnant wife and two year old son. The information manual covered no such contingency and I had to seek the advice of one of the directors through additional correspondence regarding the advisability

of bringing my family in general and the availability of health services and accomodations. The response to my letter allowed us to make the final decision in favor of the plan and aided us in adequately preparing for getting there and setting up house as a family.

Orientation: Pre-Plunge Instructions

The pre-field stage of the field school experience just discussed was pretty straight forward in the problems it presented and in the solutions found for them. The problems of the succeeding stage are considerably more difficult to identify and correlate. This stage coincides with what was known as orientation week.

Objectives

What the staff was trying to do for us during orientation week is simply enough understood in retrospect. Basically, they were trying to help us all get acquainted with 1) each other; 2) certain aspects of the general area and culture so that we would be able to see how our individual communities fit into the larger community system; and 3) certain particularly problematic aspects of data gathering and recording. In my case they succeeded in all these objectives to some extent, but by no means did I get everything out of orientation week that was planned into it. The extent to which they did not succeed is certainly due in part to their own planning and handling of the activities, as I am sure they would be the first to admit. I am not qualified to give a valid analysis of this factor, however. Besides, I am convinced after examining other factors that my failure to get everything out of the week that I might have was due mainly to factors beyond the control of the staff. The significant factors that I have identified are my lack of proper preparations, already discussed, and the two broad problems discussed below.

Unrealistic Expectations

This problem consists of two elements. The first was simply my incomplete understanding of exactly what we were supposed to be getting out of some of the activities we participated in or were exposed to. That is, I lacked a philosophy of orientation week that would have bound it all together for me. This in turn was due largely to the lack of preparations and was aggravated by the distraction problem below.

The second element in this problem was based on a partial misunderstanding of what we could expect from orientation week which led to my having an altogether unrealistic expectation. A statement in the information manual read: "During the first week the staff will make clear to you exactly what the assignments are and how to go about them." I interpreted this to mean that data gathering and recording methods would be both discussed and demonstrated during the week. Whether this is a misinterpretation of the quoted statement or not is less significant than the fact that it was completely unrealistic of me to imagine that the staff of the school would be willing and able to cram the contents of a good field methods course into something less than a week.

Distraction

What I call the distraction problem has many and varied elements all of which

in some way or another pulled my attention away from the main objectives of orientation week.

The most important of these elements - accommodations - is a problem in and of itself. Because of my wife's pregnancy it was agreed that we should be located in a town large enough to have adequate medical facilities to handle any related eventuality. The staff also preferred to have us in a town where they had pre-established contacts. These factors made Pachuca, the state capital, and Ixmiquilpan, our market town headquarters, the best possibilities. Apart from the above considerations, our space and privacy needs indicated that we would have to find a house or apartment, perhaps sharing with another small family, in which we would have equal rights to all facilities.

At the staff's insistance we concentrated our early efforts on Pachuca but two days before we were supposed to be working in the field we still had not found anything suitable. The problem we had was one of availability not of excessive rent rates. The day before we were to go into the field we turned our efforts to Ixmiquilpan where we had already been offered two acceptable houses for rent. Our final decision on these two was based mostly on how much furniture we were able to beg and borrow from their respective owners, as houses tended to be rented unfurnished in the area.

The accommodation problem, then, was adequately solved in the end. It was the fact that the problem dragged on to the end of orientation week, however, that made it part of the distraction problem. This in turn was directly aggravated by our travel weariness.

We had made the mistake of taking a long, wandering trip to Mexico of about 2,500 miles in 12 days, the last two of which were actually a delay caused by car trouble. In short, by the time we got to Ixmiquilpan we were ready to get off the road and get settled as quickly as possible. In fact, we spent all of orientation week in a very cramped hotel room which in a way was worse than being still on the road.

Apart from my impatience to get settled, I also had a generalized impatience to get going with the business of doing anthropology and not fool around with more seminars, etc. In view of my already mentioned lack of preparations for field work, this desire to cut short orientation to the background of the area and to field work during that first week was as irrational as it was unproductive.

Another element of the distraction problem was that of culture shock. For most of the summer I was unable to recognize that I had undergone any sort of culture shock at all. There was a slightly traumatic period during the first stage following orientation which I recognized and which I glibly labelled the-hopeful-anthropologist-having-to-function-for-the-first-time-on-his-own-in-the-field shock. It was only near the end of the summer, however, that I realized I had been through a mild culture shock and, to my great surprise, the first effects of it could be traced back as early as orientation week. The effect that I wish to mention here is that which one of my fellow students, who underwent a rather severe culture shock, explained and illustrated so well for us in the sessions we had just before the midterm break: When one is in culture shock the last thing he usually wants is to be exposed to, learn, or learn about something <u>new</u>. To the extent that I

had culture shock during orientation, therefore it added to the distraction problem because all of the contents of that week were new to me.

There were at least three other very minor elements making up the distraction problem which should be mentioned because they so readily come to mind with no coaxing at all when I think of that first week. First, there was the weather: it was damp and cool and as such helped create and sustain my somewhat unreceptive attitude toward orientation. Second were the audial and visual distractions outside the seminar room where over half of the activities of the week took place. I never quite got used to the trucks and buses that squeeked to a halt twenty to thirty yards from the room before loudly straining their way out onto the nearby highway. The same problem obtained for the midterm and final week reporting sessions. The third element was the different idea of punctuality that is in use in Mexico. Even though I had been exposed to it before, it was hard for me - being well steeped in Anglo-Saxon cultural constructs - to get used to and properly function in a system where nothing ever starts on time and no one really expects it to. This particular element continued to be a problem for me throughout the summer; I frequently wasted time because of it and would then get somewhat disfunctionally upset about it.

Passive participation

It may be instructive to look at my experience up to this point more closely in terms of Freilich's model for field work. Of his list of fourteen basic problems, seven of them had been solved by the end of that week and adequate handles had been provided to help us to at least start to deal with most of the remaining seven. The important point here is that most of the problem solving in terms of Freilich's breakdown was done <u>for</u> us, not by us. In this light the field school experience up to this point can be viewed as the passive phase and all that follows as the active phase; that is, active and passive with respect to the student's degree of participation in the actual solution of the problems in each phase. (Bearing in mind Freilich's (1970:187;556) criteria for the parameters of the active and passive phases in a regular field experience, I was never really out of the passive phase during the whole experience.)

The above does not imply any criticism of anyone involved. Given the nature of a field school I see no recourse for getting those early problems solved than by having the organizers of the school do it. I do believe, however, that by not being able to play more of an active part in the solution of these problems - as I would have in working up and carrying out my own research proposal, for example - I came right through orientation week without any appreciation for or understanding of the tremendous amount of work that goes into solving those problems. In retrospect, with regard to the effect on my overall attitude and consequently on my overall performance, this situation put me in a position similar to that of someone inheriting a complex and lucrative business that he has had no part in developing: he comes up short of both practical knowledge and proper attitude for successfully running the show.

(Nearly) Alone in the Field: The Plunge (With a Life Line)

This stage represents the core of the swimming lesson in the analogy. It is

when we really came face to face with the objectives of the field school i.e., to learn to use certain data gathering and recording techniques and have the opportunity to try to integrate some of these techniques in solving a research problem in the field. We were to do specific assignments, develop a research focus, use different techniques to gather data for the focus, and use certain other techniques for recording that data. All these activities were to be discussed and critiqued in weekly consultations with the staff. These consultations were for me a very vital part of the whole learning experience and are the "life line" referred to in the heading above.

I began this active part of my field school experience with the cumulative disadvantages of all the problems of deficiency just discussed, which added up to a general inadequacy to the task. When to this is added my lack of awareness at the time of what my specific shortcomings were, the initial problem became one of a general feeling of ineptitude. The result was that much of my endeavor during the summer was unproductive and even counter-productive.

Socialization and Rapport

Another major factor involved in my relative unproductiveness, particularly at the beginning of this stage, was a lack of socialization to the local culture. That it is perhaps the most important factor, is indicated by my belief that the rate of my increasing productiveness as the summer passed probably more closely parallels the rate of my socialization than it does the rate at which I became aware of my specific shortcomings and eliminated them. Much of the problem of socialization as Freilich (1970:504-506) discusses it was solved in my case by my pre-field preparations or by the staff during orientation week. Most of that which was not solved before was the part that every anthropologist has to solve for himself once in the field. With respect to sponsors (Freilich 1970:505), I believe the staff of the school could be considered as my local sponsors, but I had no native sponsor as such.

The socialization problem is that of lack of knowledge about proper behavior within the culture being studied. Based on my own experiences I see socialization as a process whereby one accumulates the knowledge necessary to function minimally within the culture through use of the technique of participant-observation. Increased socialization increases the opportunities for more and better participant-observation and also makes possible the establishment of rapport, which is the ultimate aim of this process for the anthropologist. I also see a certain automatic element in socialization as indicated by the fact that I benefited from the process without being aware at the time of the relationships just discussed. I do believe, however, that being aware of the process would have made it that much more efficient.

As socialization is a compounding process, how much rapport one gets depends on how large the original base of socialization was and on how well he handles the technique of participant-observation. My discussion of the latter comes under techniques below. As to the former, it was obviously a function of my own preparations and what I got out of orientation week. I believe that it averaged out a great deal better than my base in field methods in general.

Assignments

There were six major assignments that all of the participants were to do and hand in to the staff on a one-a-week basis. They were: two maps; a genealogy; a cultural inventory; a cultural process; a life history; and a linguistics exercise. The accomplishment of these assignments required the use of other field methods, of course, such as participant-observation and interviewing, but they were viewed by the staff as mehtods in and of themselves. Doing them satisfactorily was a minimal requirement of the field school.

In preparing this paper I have thoroughly analyzed my approach and performance in doing the assignments. In the details of that analysis I find nothing particularly instructive for the purposes of this paper. My performance varied greatly but averaged out at about mediocre by my own standards. This was both because of my general lack of preparation for the assignments and because of my general attitude toward them. The latter is the important point here. I knew that the assignments were methods and as such perhaps the core of the whole field school, but I did not operationalize this knowledge. I approached all of the assignments as obstacles to be overcome and there were times when I actively resented them. Despite my counter-productive approach to them, however, I believe that in the process of doing the assignments, having them critiqued by the staff, having an occasional opportunity to see how my fellow students were solving them, and in thinking through this paper, I did learn how to handle them for future field work.

A seventh assignment, a term paper, was to be handed in about two months after the end of the field school. The term paper was to be either based on data gathered in researching the focus problem, or was to be an analytical account of one's field experience and methodology, such as the present paper attempts to be.

Even though the point was made and stressed by the staff that the term paper was to be considered as just another assignment, I did not treat it as such. First of all, it was known that the papers might eventually be published and this gave it a great deal of extra weight for me. Secondly, I assumed from the beginning that I would follow the general pattern and do a "data paper" based on the focussed research problem. The result of this was that while I was in the field the data I was gathering relating to my focus was usually of much more importance to me than were the particular methods I used to get it; and it was certainly more important than the six assignments. In short, despite knowing on an intellectual level that method was the important aspect of the field school, I had unwittingly operationalized the ultimate goal of a regular field experience i.e., gathering data.

Focus

For me, choosing a focus involved four related problems: identifying a broad area of interest; choosing specific activities in that area; defining a research problem in terms of these activities; and, narrowing down the problem such that it could be researched in the given time.

From the moment that we knew I would be placed in Ixmiquilpan, the first two aspects of the problem were given. My background in economics served as my broad area of interest and the Ixmiquilpan market was there like Mt. Everest to be conquered. In retrospect, I wish I had not been so easily led into doing a market

study: first, I had a great deal of trouble with the latter two aspects of the focus problem once into the market: secondly, after some experience of the community in general, I discovered other areas and activities that I would have enjoyed more and which I might have been able to handle better in the time available. By the time I gave these alternatives any real consideration, however, the summer was nearly over.

We were to hand in a written rough plan of our proposed focus at the second week's consultation with the staff. Briefly, my proposal was to do a comparison between the daily permanent market and the weekly market by focusing on two similar stalls, one in each of the daily and the weekly phases. Once into the study, I expanded this to include a third stall because the weekly market had two basically different types of vendors: the ones who tended larger stalls and went on a weekly circuit of markets; and the ones who tended smaller stalls and only sold at the Ixmiquilpan weekly market. I decided to focus on fruit and vegetable stalls because they were the single most frequent type.

The points on which I proposed comparing these vendors were: quality and price of merchandise sold (I shortly lost interest in this point altogether); the processes of buying and selling stock; type and permanancy of clientele; weekly routines; social, economic, and educational backgrounds; and, ambitions. As far as it went it was not a bad proposal but it needed to be narrowed down considerably and I never successfully managed to do this. It also lacked a description of <u>how</u> I proposed to make these comparisons, that is, the specific techniques I would use and why I would be using them. That is, I lacked a concrete methodology for solving the problem.

Methodology

My solution to the problem of methodology for my focus problem was slow in evolving and, in fact, never really materialized. The basic reason for this was that I lacked a clear understanding of what methodology was all about.

The field school staff had discussed it with us during orientation week and also during the weekly consultations; they referred to it as the conceptual approach one uses in solving a problem. Pelto, in contrasting it to research techniques, says that "methodology denotes the 'logic-in-use' involved in selecting particular observational techniques, assessing their yield of data, and relating these data to theoretical propositions" (Pelto 1970:4). As I understand it now, methodology more than answers the questions of what you are going to do and how you are going to do it; it also answers the question <u>why</u> you are going to do it in that particular way. These ideas were all very confused in my mind at the time, however, and this confusion was made worse by my trying to fit the assignments into the concept of methodology. I think that as they were pre-conceived by the staff before my focus was even thought of, that it was only natural that some of them (and maybe all) were not going to fit into anything that I would later be able to identify as my methodology.

Techniques

The techniques that I used, therefore, in gathering data for my focus problem were not too well integrated into a methodology. Nevertheless, they were reasonably

productive.

From the outset participant-observation was my most frequently used technique. The more of it I did the more productive it became for two reasons: I was narrowing down through trial and error and some modest insights the type of behavior that was significant to my research problem; and I was gradually refining the technique itself by observing my own performance in the light of tips from the staff. I was learning what to observe in that particular situation and how to observe in general.

With respect to participation I was never really out of what has been called the "privileged stranger" role (Freilich 1970:539). Simply put, the reason is that I never developed sufficient rapport with any of my chosen informants. While still in the field I had decided that this was because of two factors: the nature of market activity which continually fragmented my interactions with my informants; and the nature of the field school with its diverse and somewhat divergent requirements and relatively short time in which to meet them. These two factors are undoubtedly important, but I now believe that they do not account for my deficiency in rapport in its entirety. It seems clear now that, even though participant-observation was so important to me as a technique, I did not learn to use it adequately while in the field. My incomplete - or, rather, unoperationalized - understanding of the relationship between participant-observation, socialization, and rapport is certainly implicated here as a main cause of an inefficient use of the technique.

In combination with, and as an integral part of my participant-observation, I used what Freilich calls "conversational interviews" and "informal focused interviews" in his discussion on interviewing (Freilich 1970:557-62). I also used focused interviews in doing all of the assignments. I had no particular trouble with these three interviewing techniques and I believe I learned to handle them fairly well.

Later in my research, to try to gather supplementary data on fruit and vegetable vendors in general with which to compare my three focus vendors to the categories they were supposed to represent, I had a stab at using a standardized interview (actually three different schedules, one for each type of vendor). There were two factors which made this an unproductive endeavor. First, I did not really have sufficient information on the whole system to make up a series of meaningful questions. Second, I did not have sufficient rapport with the people I was trying to interview. I managed to salvage some of the effort by memorizing the questions and then converting the interview into an unstructured one. But this technique, although productive of data, took so much time in view of the limited use to which the data was going to be put that I shortly gave it up.

As to other techniques I was not too adventurous. I tried network analysis on two of my focus vendors with only limited success; again, I had insufficient data to do it. I also tried a ranking experiment where I had my informants rank occupations instead of people. I had no particular end in mind in doing this experiment except to have the experience of having done it. I learned nothing from the data but I did get some insight into how to handle the technique. As for photography, I used it only to help in establishing rapport. Its usefulness, of course, depended on how people felt about having their picture taken. In Ixmiquilpan I found it very useful in some cases and completely detrimental in others.

The Focus-Stalls: Special Problems

My criteria for choosing the three focus stalls were very simple. I wanted each one to be as representative of its own category as possible in terms of type and quantity of merchandise sold and in terms of manner of operation, that is, tended by the owner assisted by his or her spouse and/or other members of the family. Apart from that, the main thing I was concerned about was potential rapport. In my initial random conversational interviews with the market people I always announced my purpose directly and plainly. What I was looking for in their response was a certain minimum receptiveness to me and my purpose.

I was most successful in choosing the daily market focus stall. It was owned by José Velasquez. It was with him and what I call his extended market family (his brother owns two stalls in the market) that I managed to establish the best rapport as the summer passed. The advantage I had with them in comparison with the other two focus stall owners is that they were available daily at their place of business in Ixmiquilpan, whereas the others were there only once a week. One problem I had with them was maintaining rapport. This centered around a budding family crisis. José had become less and less concerned with the actual running of the stall in the two years they had owned it and was leaving it in his wife's hands more and more frequently to go off on trips both related and unrelated to the business. Flora, his wife, had a complaint about this arrangement and used my frequent presence to air it, trying to get my sympathy. She had my sympathy all right; the problem was to try not to show it - to try not to involve myself in the development of their relationship concerning this point. The problem - that is, my problem - was solved by time: I was not there long enough for the situation to come to a head. But if I had been there for a longer study, I would surely have had to decide on a course of action and I still do not know quite what it would have been.

As a stall representative of the larger weekly circuit type I chose that of Pedro Masedo. The problem that evolved out of my relationship with him was a major one and can be summed up as one of misjudged character. There had been a researcher from Oregon who had studied the market for over a year finishing up in the spring before the field school began. Pedro claimed to have been one of his best informants. He showed an immediate interest and understanding of what I was trying to do and I thought that I had found a "natural." I did not look any further. Whatever the truth of his connection with the other researcher, however, Pedro turned out to be an untrustworthy informant. I found out in one afternoon five different major points on which he had wilfully given me misinformation, starting with his name (Pedro Masedo is the phoney name he gave me). I was hurt, furious, and flabbergasted.

I stewed over this situation for a few days not knowing whether to confront him with his misinformation or just drop the whole thing. In the end I decided for confrontation (as I viewed it then) for two reasons: I wanted to try to find out or feel out why he had misinformed me so that I might be able to assess the validity of the other information he had given me, and I wanted to strike a blow for the honor of social science research in general. The latter reason seems to me as unrealistic and unproductive now as it was all-important then. As it turned out - despite my calm, cool handling of the situation - I still do not know for sure why

I was misinformed; nor do I feel that Pedro Masedo has any better appreciation for the importance of social science research. When it was happening I thought that all was lost with respect to this aspect of my focus. It was not so, however, because most of the information Pedro had given me checked out with my own observations of his and similar stalls and with what other stall owners told me.

José Carmen Martinez was the owner of the third type of stall. The problems I had with him were the basic ones of getting and maintaining rapport and what I believe is the only instance I encountered of the "spy problem." José Carmen was not from Ixmiquilpan, unlike the previous two; he lived in a small, dispersed settlement about twelve miles from the town. His stall was among a group of stalls owned by people from the same village, many of whom he was related to. From the beginning he showed varying degrees of suspicion about my intentions; in our first encounter he had asked me - in what I had thought was a joking way - if I was some sort of "instigator."

It was at the end of our second long interview that it became apparent how little lasting rapport I was establishing. José Carmen, accompanied by most of the other vendors from his village and encouraged by them, demanded that I show some kind of documentation as proof that I was what I said I was and that I had an official right to be doing what I said I was doing. My proof (my student card, the address of one of the directors of the field school, and the assurance that the local town hall was aware of our presence) seemed to satisfy them. The next week I met with them and had what seemed to be a good, but short, interview; and I also arranged to deliver some photos I had taken of them to his village. When I delivered the photos I had another short but productive interview with José Carmen. I thought at that point that all suspicions had been allayed and that I was "in" at last. The following week at the market, however, I got a complete avoidance reaction from him (he disappeared shortly after I arrived) and a run-a-round from his wife and the rest of the vendors from his village. It was obvious from the way they handled this that they were afraid of me for some reason. In retrospect, I believe that José Carmen wanted to trust me but that the total suspicions of the group won out. It seems fairly clear now that I was considered some sort of spy or instigator.

Recording techniques

Once the problem of what to observe begins to be solved, the problem of what to record becomes the most critical. In my case, at least, it was also intricately involved with the problem of how and when to record.

During orientation week we had been told what recording techniques we were expected to use, and we were given examples of them. We were to make three kinds of field notes - substantive, analytic, and methodological - and keep what was called a log. Despite the explanations and examples, however, as with so much of what went on during orientation week, I managed to get right through the week without a full understanding of recording techniques.

As to when to record, the problem almost solved itself. In the market, where I did most of my work, most people I talked to knew what I was doing and I never tried to conceal that I was recording the information I got. I usually recorded

in brief on the spot and wrote it up later at home.

As to how to write up my observations, I had more trouble. In the beginning my field notes tended to be narrative, unfocused, unconnected with each other, and strictly of the substantive variety. Only gradually did my notes begin to represent distinct units of information; even more gradually did they become connected through a never-quite-systematic system of cross-referencing; and it was at a snail's pace that they finally began to show that I was doing analysis or that I had any inclination at all of what methodology was all about.

As my notes so readily show, I was very weak on analysis in the field. I believe I was working under the assumption that the field was for gathering data, while analysis could always be done after leaving the field. I felt I had so little time in the field that analysis was certainly secondary to getting the data. I see now that this approach leaves one's data on the first basic level of inquiry without providing a clear indication of where they are going to lead once the analysis is attempted. In this way it is counterproductive to any sort of focus. I got beyond this first level of inquiry only infrequently during the whole summer.

In showing how few methodological notes I managed to write and of how little value they really are, it is enough to say that in writing this paper - which is, after all, a methodological one - I have found my notes all but useless.

The log presented quite another problem in data recording. It was supposed to function like a combination of a ship's log and a newspaper editor's daybook. It was to help one keep track of what he had done, who he had seen, when and where he had gone, what he had spent, and to help him plan future activities. Connected with the field notes by a good cross-referencing system it could have been very useful, indeed. Unfortunately, the summer was over before I finally appreciated the potential value of the log. My own effort at keeping the log started out as a diary and ended up as little more than a social date book.

Break

About half way through the summer there was a break which had a two-fold purpose. First, it gave all the participants a chance to interact with each other and exchange experiences formally and informally. Second, it provided a chance to get away from the field situation entirely for a rest and, perhaps, a new perspective. The formal exchanges - short talks by each student - were instructive insofar as they dealt with methodology. Even more instructive, however, were the informal discussions that occured outside the seminar room.

The last five days of the break were free vacation time. The student was left to go where he wanted. In retrospect, even though it seems like a good idea on the surface, I do not think that these five days were particularly useful to me with respect to the total experience. I believe I could have utilized this time better by either staying in the field situation or having more opportunity to exchange experiences informally and semi-formally with my fellow students and the staff.

On informal exchanges with fellow students, I should mention that I had more than my fair share and got quite a lot out of them. For one thing it is a good confidence builder to know that others are encountering similar difficulties and it is very instructive to hear how they are dealing with them. The reason for my

particular good fortune was the fact that we had rented a rather large house and that it was in the same town as the headquarters of the field school which was the only large town close to many of the participants. Everyone had a standing invitation to visit me anytime they were in Ixmiquilpan (getting supplies, seeing the directors for some special reason, etc.) and we had frequent visits throughout the summer. During the final week's seminars we had about half of the field school participants staying under the one roof. The sharing of experiences with my fellow students on these occasions was a highly important part of my learning experience for the whole summer.

The Last Week: Drying Off and Recounting

During the last week each participant was required to give a formal presentation, based on his experiences, in which he was to describe generally the community he worked in, the conceptual approach he used, and the specific techniques he used. He was also encouraged to give a preliminary analysis of his research focus. Again, the emphasis was on methodology.

This week involved three distinct learning experiences for me: The informal interactions with my fellow students mentioned above; hearing the others' formal presentations of their experiences; and preparing and presenting my own report. With respect to the total experience of the summer it was probably the preparation of my own report that was most significant. It was through the process of preparing the report that I began to become aware of my own shortcomings with regard to the objectives of the field school and aware, too, of the extent of my poor understanding of the concept of methodology. It was also during these preparations that it became evident that I would have to write a methodological term paper in order to get the maximum benefit from the field school.

Summary

In summary, I have given a brief analytic description of my experience in the field school and have tried to show how the elements of the experience relate to each other and to the total experience. In terms of problems, I have shown that my most extensive one was the lack of preparations and that the most intensive one was a combination of an incomplete understanding of the objectives of the field school and of the whole concept of methodology. I hope my analysis has given a basis for understanding the significant differences between a field school experience and a regular field experience. I also hope it has been made clear that I learned a great deal about field work and about myself as a potential tool in doing field work. Finally, and perhaps most importantly, I have emphasized that it has been the writing of this paper - rather than a paper based on "hard data" - that has made the field school experience more of a complete learning experience for me.

Heuristically, in connection with the last point, the information I got from my fellow students in both formal and informal sessions would indicate that requiring a methodological paper as the final assignment for everyone would both tend to make the participants' activities in the field correspond more to the objectives of the field school (that is, the learning of method as opposed to the gathering

of data) and tend to give the student a better understanding of his total experience.

Conclusion

The ½ in my title refers to the field school experience in general and is meant to indicate a field school's present status as an optional and somewhat rare experience between graduate course work and dissertation field research. If my own experience is any indication of the potential value of a field school, then I would like to think that there may come a time when a field school could properly be referred to as Phase II.

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ENVIRONMENT, PRODUCTION, AND SUBSISTENCE: ECONOMIC PATTERNS IN A RURAL OTOMI COMMUNITY

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Este trabajo presenta un análisis económico desde un punto de vista ecológico de una pequeña comunidad Otomi. Aunque las comunidades Otomies son descritas frecuentamente como "dispersas", el asentamiento no se lleva a cabo al azar, sino que esta determinado por la explotación de tres zonas ecológicas distintas. En los ultimos años, ademas, el mayor acceso a los servicios suministrados por el gobierno ha conducido a un comienzo de nucleo comunal. Zothe no es auto suficiente en la producción de alimentos debido a la escasez de lluvia y de tierra arable. La primera actividad económica es la producción de costales hechos de ixtle de la lechugilla. La unidad familiar constituye la unidad básica de producción. Una familia promedio obtiene 80 pesos por semana de la producción de costales, que son usados para comprar alimentos. Zothe ha experimentado lo que Dalton ha llamado "crecimiento sin desarrollo." La demanda relativamente estable de costales ha permitido un rápido aumento en la población, pero el nivel de vida permanece en un estado de mera subsistencia. La economía puede ser descrita como un "sistema estable de equilibrio;" los periodos de mayor necesidad son confrontados con un incremento de producción, o con un salario de un trabajo temporal, pero el tradicional sistema económico persiste. Sin embargo, la estabilidad de Zothe es vulnerable; cambios en la demanda de costales podría provocar profundas dislocaciones económicas.

Having expressed a general interest in peasantries, I was placed in a rural Otomi community by the name of Zothe. After a short time in Zothe, I decided to study the local economy in terms of the nature of its relationship to two vital sets of factors; the physical environment and the broader Mexican economy. The research was especially concerned with investigating the basis of subsistence (including the relative importance of various economic activities), the influence of fluctuations in environmental, technological and marketing factors, and the importance of rational economic strategies (modification of behavior through conscious decision making) among the members of the community.

On the Use of Terminology

In recent years there has been a continuing debate (Dalton 1968, Le Clair and Schneider 1968) among economic anthropologists regarding the application of standard economic concepts such as "scarcity" and "profit" to primitive and peasant cultures. A brief explanation of the usage of certain terms in this paper is therefore in order.

The two schools of thought on this issue have become known as the "substantivists" and the "formalists." George Dalton, a substantivist and a student of Karl Polanyi, describes the two factions in the following manner:

> The "formalist" group takes what it believes to be the universally applicable concepts of economic theory--scarcity, maximizing, surplus--as that which is to be incorporated in

> economic anthropology and analyzes the empirical data of primitive and peasant economies in these terms (Pospisil 1963; Firth 1965). They use the leading ideas of elementary economics (Samuelson 1967, Chaps. 1-3) as a guide to analyzing all economies. (1969:65)

While the substantivists maintain:

> The concepts of economic theory yield useful insights when applied to our own economy because the institutionalized rules of market exchange and the use of our kind of money and technology induce economizing and maximizing activities; but to employ these terms to analyze the non-market sectors of primitive and peasant economies is as distorting as it would be to use the concepts of Christianity to analyze primitive religions. (Dalton 1969:65-6)

And, in reference to peasant economies, Dalton later states:

> Peasant economies are small scale, underdeveloped market economies, in which production for market sale, the use of Western money, the availability of purchased factors of production, and other features of market economies are present. The structure and performance of the commercialized sectors of peasant economies are amenable to analysis and measurement in conventional economic terms (precisely because money, prices, and markets are important). (1969:67)

In the course of this paper it will be shown that the economy of Zothe is a peasant economy of this type. It depends on the production and marketing of costales (sacks made of maguey fiber that are similar to burlap sacks) for a major portion of its subsistence. Hence even the substantivists would not object to the application of classical economic terminology to the market related aspects of Zothe's economy. However, this paper will deal with a broad range of "economic activities" and not just those dealing with the market. "Economic," as used here, will refer to any behavior that contributes to meeting the material or subsistence needs of individuals within the community. This usage is very general and is more substantivist in orientation than a formalist definition that would stress maximization of gains or profit. Although the emphasis will be on material factors, it is recognized that many "material" needs are related to social factors.

The term "rational" will refer to the process of conscious decision making and should not carry a connotation of correctness or astuteness.

Methodology

The data for this paper were collected during six weeks of living in the midst of a small, dispersed Otomi community. Introduction into the community was via the field school staff who arranged housing in the quarters of a vacationing school teacher. It was she who presented me to local leaders upon my arrival. The first few days were spent walking around the community to familiarize myself with its characteristics and meeting many of the residents in their homes and at work. Likewise, many came to my room to have a look at me, especially during the evening hours. After this initial period of intense mutual curiosity, I began to sense that certain of my new acquaintances were good potential informants in that they appeared to have a broad general knowledge of their culture and they were willing to answer my inquiries and share their time with me. A considerable portion of the first few weeks was spent in participant observation as I followed the ac-

tivities of these key informants. Later on, more time was spent conducting structured and unstructured interviews and gathering corroborative data from a wider range of informants and secondary data from printed and official sources.

I also attempted to elicit native attitudes toward various local economic activities by having subjects rank a deck of cards (listing these activities) in terms of importance to them. This procedure was not a complete failure, but it did not generate the results that I had anticipated. My informants seemed to encounter a great deal of difficulty with the printed cards due to problems of literacy, and even when the content was spoken aloud they did not fall easily to the task of making a straight ranking of the cards. The most frequent reaction was for the individual to make two piles of cards; one for the activities that he participated in, and the other for the activities he did not participate in. None of the informants had the inclination to spend more than five or ten minutes on the rankings. Perhaps people in a relatively homogeneous culture with a subsistence economy tend not to think of various activities in terms of greater or lesser importance (by emic criteria); or perhaps they were not interested in a game construct, like ranking, with which they have little cultural experience.

The Community

Zothe is a community of 396 Otomi Indians living in some 80 households, and is one of the five barrios of the Pueblo of San Martin del Cerro. San Martin, in turn, is located in the municipality of Cardonal, which is in the district of Ixmiquilpan, which is part of the state of Hidalgo.

The inhabitants of Zothe have traditionally viewed their community as a manzana or neighborhood of San Martin del Cerro. Their church, cemetery, patron saint, school, and officials such as the juez and representante (see Betley 1969 for a discussion of offices) were those of San Martin del Cerro. However, the relationship of Zothe and el centro (as San Martin is referred to) has undergone a certain modification in recent years. Zothe has had its own school and its own representante, juez, and faenas (communal work parties) since 1957. The structural relationships of these bureaucracies are such that they are administered directly from the municipio of Cardonal rather than from San Martin. The presidente municipal refers to Zothe as an independent barrio. Despite this, the inhabitants of Zothe consistently view themselves as constituting a manzana of San Martin. They continue to maintain religious and familial ties with San Martin even though many of the traditional secular ties have broken down.

Kinship patterns overlap considerably in this small community and an individual's neighbors are usually recognized consanguinal or affinal kin. The everyday language is Otomi and many inhabitants have very marginal Spanish ability.

The Physical Environment

Zothe is located in that portion of the state of Hidalgo known as the Valle del Mezquital, most of which is an arid plateau over 5,000 feet above the sea. The main sources of water are the few narrow rivers that traverse the valley. The principal flora are represented by such desert plants as maguey, mesquite,

nopal cactus, organ cactus, and candelabra cactus. Stands of trees and shrubs exist only along the drainage basins of rivers and streams, near occasional springs and where irrigation has been extended to the dry land. Wild fauna formerly included such typical North American desert animals as rabbits, squirrels, deer, coyotes, various snakes, hawks and other birds, but deer have been eliminated by over hunting, and rabbits, too, are declining.

Seasonal changes parallel those in the United States, although there is less variation in temperature range. Yearly rainfall is highly variable with frequent long periods of drought, as with the seven year drought from 1961-8. On other occasions there has been disastrous flooding from heavy rainfall as in 1944 and 1971.

The physical boundaries of Zothe include an area of about 1 and 1/2 by 2 and 1/2 miles. It is located along a barranca (stream bed) that drains rain water from Mt. Santuario to the Tula River. On either side of the barranca rise parallel ridges of rolling hills running north and south. Water flows in the barranca only during those infrequent periods when there is rainfall. The water shortage is so acute that the Patrimonio Indigena del Valle del Mezquital (a governmental development agency) delivers water for household use by means of a tank truck twice weekly. This water is stored in two cement tanks constructed by the local work parties. However, this supply is frequently insufficient for the needs of the community and the people must resort to the laborious task of drawing water by hand from the three deep water wells within the community.

Although an increasing area has been brought under irrigation from the Rio Tula in the vicinity of Ixmiquilpan, the altitude of Zothe precludes its benefiting from this development program. Nevertheless, a certain amount of individual irrigation is possible from the barranca on those sporadic occasions when there is water in it. The men of Zothe frequently comment on their good fortune, for certain neighboring communities are not located along drainage systems and therefore are not able to utilize run-off rain water for occasional irrigation.

Land Utilization

The topography of the land that Zothe occupies is of considerable importance in determining land use patterns, given the present level of technology in the area. The primary factors are the relationship of the land to the barranca and the elevation of the land. The actual bed of the barranca occupies only a narrow and rocky strip through the center of a relatively level flood plain. This land is divided into rectangular maize and bean milpas (fields) with borders of maguey. The milpas are connected to the stream bed by shallow irrigation ditches that are maintained by the individual owners of each milpa.

Above the flood plain the land rises steadily to the crests of the hills flanking the barranca. The people of Zothe have constructed their houses of organ cactus, stone, or tabique (brick; see Padelford 1969 for a description of Otomi house types) on the slopes just above the flood plain of the barranca. Adjoining each house are corrals for domesticated animals, plots where nonirrigated plants such as nopal cactus and lechugilla are cultivated, and work areas for costale

production. This area will be referred to as the habitation zone.

Above the habitation zone the land continues to rise to the tops of the hills flanking the barranca. It is characterized by steep, rocky terrain with a natural cover of cacti and other desert plants. In Zothe, the only cultivated plant in this zone is an occasional patch of lechugilla. This zone is referred to as monte and it is primarily used for the pasturage of sheep and goats and for the occasional hunting of such game as rabbits and squirrels. Although the precise measurement of land areas was not possible due to a lack of maps and surveying equipment, I estimate (by pacing distances) that approximately 20% of the land area consists of milpas in the barranca flood plain, another 20% in the habitation zone, and about 60% in monte.

Kinship

Kinship in Zothe is characterized by bilaterality, exogamous marriage (usually village exogamy due to close interrelationships within Zothe), and a strong tendency toward patrilocal residence following marriage. Inheritance is shared equally by all siblings, and women retain their property rights after marriage.

The ideal behavior for a father upon the marriage of a son is to build a house for him adjacent to the family home, providing he has sufficient land and resources for the purchase of materials. Each son ideally has his own house, and the original family home is taken over by the youngest son upon the death of the father. In practice, the construction of these additional houses may proceed slowly over a period of several years, during which the young married couple resides in the house of the father. In one case that I observed, a father was simultaneously constructing three houses, one of which was nearly completed, another which had walls only, and the third which was in the initial stages of having its foundations dug.

The family exhibits many characteristics of extended organization. Both married and unmarried sons and unmarried daughters share communally in production and consumption. Work activities and monetary resources are administered by a somewhat patriarchal father. This ideal type of family organization, however, does not develop fully in many instances due either to the early death of the father or to lack of economic resources. If the father dies when most of his children are still of premarital age, the eldest son may attempt to assume the role of the father in providing for his mother and brothers and sisters. But if the children are all grown (or as they reach marital age) they tend to set up independent households.

Settlement Pattern

Often, rural Otomi communities are referred to as having "dispersed" or "non-nucleated" settlement patterns (Coleman 1969; Boyd 1969). Zothe reveals that although there formerly was no tendency toward a nucleated settlement, the pattern was not characterized by a random scattering of households over the available terrain. Rather, household locations were determined by two principal factors:
1. Location within the "habitation" zone, i.e. on land elevated just above the flood plain of the barranca. This allows maximum use of the flood plain for

cultivation, provides easy access to the milpas, and protects the houses from the occasional flooding that occurs. 2. The tendency to build the home of a newly married man on property contiguous with the household of his father. This maintains the productive organization of the family in agriculture and in the making of costales.

In recent years there has been an incipient move towards a nucleated center for the community due to the following developments. In 1957 a primary school was opened on a knoll in the north central portion of the community. Subsequently the ground in front of the school was leveled creating a plaza around which two rooms for teachers' quarters were constructed. Then the community constructed a water storage tank and sinks for the washing of clothes on the eastern edge of the plaza. Subsequently nine homes have been begun bordering the plaza or in the immediate area of the knoll. Of these, five are sufficiently completed for habitation.

In 1969 the first electrical lines reached Zothe, bringing this utility within reach of most houses in the area. However, the lines did not extend beyond the school to those houses in the northwestern corner of the community. These residents are dissatisfied with this situation for they contributed equally to the faenas and assessments of 15 pesos per household that brought electricity to Zothe. Local leaders state that there is presently no indication that the lines will be extended to the northwest sector and they are considering the establishment of a colonia of residents from the northwest on a hill just to the west of the school.

Agriculture

Over and above the primary subsistence crops of maize and beans an additional planting of peas is made after the maize harvest, if there is sufficient rainfall. (See Table 1). Pulque is an important part of the local diet as in many other Otomi communities, but Zothe has relatively few maguey plants and must import most of its pulque from areas that specialize in pulque production such as San Miguel Tlacintla to the northeast (for a description of the technology of agriculture and pulque production see Early, 1969). In addition, other plants such as nopal cactus, figs, and peaches are cultivated. The gathering of tunas (nopal fruits), quelite (pigweed) and the fruits of the garrambullo (candelabra cactus) provide some variety in the diet.

Despite the above mentioned agricultural activities and other food resources, most families are not self-sufficient in food production. This is due to the shortage of arable land relative to the population, and the low level of rainfall. Milpas vary in size, but they tend to be rectangular in shape, measuring about 10 by 45 meters. The wealthiest household in Zothe owns 27 milpas, and two others own 22 milpas apiece, but the vast majority of households own little more than five to nine milpas (under half a hectare) and two households have no milpas at all.

In years of adequate rainfall, the households with the largest numbers of milpas report that they produce sufficient maize to last them throughout the year. Families with fewer milpas state that they never produce enough maize to last the entire year. The size of the harvest and hence the length of time that it will

feed a household is directly correlated to the amount of rain during a given growing season. Table 2 shows the length of time for which the harvest fed two representative households during the past few years. A host of other variables affect the production and consumption of food for each household. These include the number of persons in the household, the amount of effort expended in weeding and protecting the crops from predator damage, the possibility of hail damage, and the maintenance of the irrigation canals to take advantage of water in the barranca. Rather than presenting a detailed quantitative micro-analysis of these and other factors, it is sufficient to point out that even under good conditions (given the current level of technology) fewer than 10% of the households in Zothe can produce enough maize and beans to meet their needs for one year.

Costal Production

Since the environment does not provide sufficient food, given the current level of technology and the present population, it is evident that the inhabitants must engage in some other economic activities that lead to the acquisition of food. The only other alternatives are migration or starvation. Cottage industry has provided the most significant means by which the people have compensated for the lack of sufficient agricultural production. Zothe has specialized in the manufacture of costales of ixtle fiber. The people frequently refer to the making of costales as their oficio (trade). Informants were uncertain as to how long costales have been made in Zothe, but they state that it has been for a very long time. One 52 year old informant states that costales were being made at the time when his great grandfather was a boy. Every household participates in at least one phase of costal production. Those that have sufficient manpower engage in all phases of cultivation and production. Table 3 shows the stages of costal production and division of labor for a representative family of eight persons. A young married man without children, or a single person may cut and extract the ixtle fiber since these are essentially one man activities. Spinning, however, requires at least two persons, and usually a third is weaving simultaneously. Therefore the worker who is not a member of a larger household tends to sell the ixtle he produces to the larger households.

The weekly cycle of activities in Zothe is highly geared to the production of costales for the Monday market in Ixmiquilpan. Tuesday is considered a day for relaxation and visiting within the community, although a certain amount of light agricultural work may be done. Wednesday and Thursday are devoted primarily to agricultural tasks, especially from April to November when there is considerable work to be done in the milpas. Friday, Saturday, and Sunday are the days when most of costal production is accomplished. Sunday is usually a day of long and hard work, and some weavers work through the night to increase their earnings the next day at the market. The price for costales ranges from fifteen to sixty pesos per carga (pair) depending on the size. It is difficult to estimate the level of production for the entire community due to fluctuations in production, but the ceiling on weekly earnings for a household working throughout the week seems to be about 300 pesos. However, most households devote only about two or

three days of labor to costales and probably do not average more than 100 pesos per week. One typical family's weekly earnings ranged from a low of 30 pesos to a high of 105 pesos during the six weeks of my field work. (The total amount averaged out to 80 pesos per week.) A need for food or cash definitely stimulates production.

The costales are marketed in two ways. A number of producers have standing relationships with professional dealers in Ixmiquilpan. These dealers give to the weaver specifications for a particular type of costal. The weavers then make a demonstration sample to show the dealer (marchante). If the manufacture is satisfactory, a set price per carga is agreed upon. The weaver then produces this design until another one is requested. This usually follows seasonal crop fluctuations as a change in August from small costales to hold vegetables to larger ones to hold maize was requested by certain merchants. Delivery of costales is usually made during the Monday market but may be made any other day of the week as well at the home of the dealer. The relationship between a weaver and his marchante may endure for a considerable time as long as the costales are delivered when promised, are of acceptable quality, and the price for them is competitive.

Manuel Vega has dealt with the same marchante for about 20 years and considers him to be an equitable man. When Manuel is short of cash he can borrow up to several hundred pesos from his marchante against future production. The majority of weavers in Zothe, however, do not have standing relationships with dealers and must compete on the open market in Ixmiquilpan early each Monday morning. They have very incomplete knowledge of the distribution and marketing of their costales beyond the Ixmiquilpan market. For some types of costales they are even unaware of the intended use of the product. They say, "We just make them according to the specifications given us, and then they send them to the Sierra and who knows where else?"

The demand for costales appears to have been relatively stable for at least the lifetime of the present inhabitants. No one remembers a time when the sale of costales did not help feed their families. For this reason the people of Zothe express a certain confidence in costales as a trade even though several informants stated that it is tedious work and they have considered giving it up.

Wage Labor

At the time of this study there were three categories of full time wage laborers among the people of Zothe. The first group consists of those who hire out as peons to work in the fields of their neighbors or for farmers in nearby communities. These persons are paid by the day and the standard rate is five pesos per day plus several liters of pulque, and food in the form of beans and tortillas. Peons are usually individuals who have little or no land of their own to till or they may be boys who have been hired out by their fathers. It is difficult to estimate the total number of persons employed in this fashion for individuals hire out by the day when there is work to be done and there is a great deal of variation through time.

The second group of wage laborers are those who migrate to Mexico City to work as peons in construction or in other menial jobs. Most of the men in Zothe have taken such jobs at one time or another, but they commonly return to Zothe after several months of labor in the city. Some men leave every winter when there is little work to be done in the fields. The number of men who have gone to Mexico and remained on for more than a year is relatively very few. I learned of only four men who have been in Mexico City for more than a year. All of these were individuals in their early twenties or late teens. The longest has been in Mexico City for five years. The kin of these individuals express the belief that these migrants will return to live in Zothe eventually. Informants state that although it is possible to earn a much higher wage in Mexico City (the average is about 800 pesos per month), living expenses are high and the work is hard. Many peons live in the very buildings they are constructing to avoid the payment of rent. Those informants who took their families to Mexico City state that it is virtually impossible to save money while there due to the necessity of renting living quarters and the higher cost of food.

The third category of wage laborers is composed of two men who are employed as apprentices at a church-supported machine shop in Cardonal. This project is designed to train local men as mechanics. It is sponsored under the auspices of the Archbishop of Tula and is staffed and given financial support by Catholic groups in Germany. The workshop is known as el taller and its expressed goal is to aid in the development of the Mezquital Valley. The taller is currently training 36 men from various communities in the municipality. The trainees earn 600 pesos per month in salary plus 500 pesos as a Christmas bonus.

No men from Zothe have to this date worked as migratory laborers in the United States. However, many stated an interest in acquiring such jobs, expressing the hope that they would be able to save considerable sums to bring home.

Handicrafts

Another program developed from the outside under the auspices of the Archbishop of Tula is intended to stimulate the production of handicrafts with native motifs such as embroidered napkins and tablecloths. It is staffed by volunteer women workers from Mexico City. About 15 women from Zothe are enrolled in this program. Before new women are accepted they must show their skill by making demonstration pieces. Once accepted they produce designs according to specifications requested by the volunteer workers with materials supplied by the organization. The ladies visit once every three weeks to collect finished pieces, make payments, and to leave materials and specifications. The crafts are then marketed through a nonprofit store known as Jamadi ("thank you" in Otomi) in Mexico City or through one of several other outlets in other cities. The average earnings for ladies from Zothe is about 80 pesos each three weeks. This represents a form of part time labor because the embroidery work is sandwiched between the other daily activities of the women.

The weaving of ayates from maguey fiber is an important activity for women in many neighboring communities, but very few are made in Zothe itself. Only one

woman was observed spinning maguey ixtle for ayates there during the entire period of the field school. The people of Zothe explain this by stating that they prefer to weave costales rather than ayates because the labor is less arduous and because the return is greater for the amount of time spent.

Individual Economic Activities

In addition to the major types of economic activities discussed up to this point in which numbers of residents participate, there are other economic activities that are conducted on an individual basis. All of these are related to the provision of goods or services to other members of the community, and hence are primarily internal in nature. Services include such activities as providing truck transportation, renting oxen, cutting hair, castrating pigs, playing music, and midwifery. The provision of goods includes such enterprises as the local tienda (store), vending pulque, and making boots. None of these constitutes full time employment by itself.

Of these, the truck operation is by far the largest in scale. In 1967 an old truck was purchased for 22,000 pesos by a well-respected village elder (in monthly payments of 1,000 pesos). The primary function of the truck is to carry passengers and cargo to the Monday market in Ixmiquilpan. The truck makes trips from Sunday afternoon until late Monday evening. The passage is one peso each way, plus an additional peso for large bundles or cargo. The truck service is normally discontinued for the rest of the week although it is available for hire. The day rate for a trip to Ixmiquilpan is 30 pesos, and the night rate is 60 pesos. The owner is strict in the application of these rates even if he is called upon to take a seriously ill kindred (not of his own household) to the hospital. The owner of the truck states that this is the only way he can meet the high maintenance costs of the truck and stay in business. This explanation seems plausible, for the unpaved roads in the area are extremely rough on vehicles, and frequent repairs are necessary. The people of Zothe use the truck heavily on Monday, but they avoid renting it outright if possible, due to the high cost. They do not voice any detectable resentment against this policy, apparently because the truck's owner is highly esteemed as a community leader and they enjoy the convenience of having a local vehicle on market day.

Some Basic Characteristics of the Economic System

Since the 80 or so households of Zothe manifest a relatively high degree of homogeneity in terms of behavior and resources compared to more industrialized and urban communities, it is possible to speak of its economic organization in fairly general terms.

It is a community of subsistence farmers and cottage industrialists organized at the household level. The household may consist of a single conjugal nuclear family or may extend to include the families of married sons. All members of the household, except for small infants, participate in both agriculture and cottage industry. The father directs the activities of the household to a large extent, and controls the purse strings. Agricultural yields are insufficient to meet the

food requirements of the household and the manufacture of costales has become the single most important economic activity. Most of the cash earned from costales is immediately spent on food-stuffs at the Ixmiquilpan market. In addition, many men seek temporary employment in Mexico City during the winter months and some provide services and goods on a part time basis within Zothe. (A flow chart of the major subsistence activities in Zothe is presented in Table 5.)

Variables Affecting the Economic System

The economic system of Zothe may be seen as a complex of goal-directed behavior patterns interrelated with environmental and technological factors. The basic goal of the behavior patterns is the maintenance of human subsistence. As changes are introduced into the economic system the nature of the relationships between other elements in the system are likewise modified. Krupp (1968:248), refers to this interrelatedness as "equilibrium theory" and discusses variations within the system in the following statement:

> A system may exhibit properties of stability or instability. If unstable, it may be cyclical or fluctuating. It can exhibit stability in a variety of ways. A system may be stable for changes in conditions of a certain magnitude and unstable when conditions change beyond some designated limit. A system may be stable only for certain ranges of a particular variable....The stability of an equilibrating system is established by the system's tendency to react in a constant way to change introduced into the system. (Krupp 1968:249)

Conceivably, there are many types of fluctuations that could effect the economy of Zothe. For the present, however, the discussion will be limited to variations in the system that have occurred during the lives of the current residents. Within the physical environment the most constant threat is that of drought. If Zothe receives less than three or four good rainfalls during the growing season it reaps no harvest. As mentioned previously, the seven year drought of the 1960's was a period in which virtually no harvests were realized, despite yearly planting. This drought was so severe that even the lechugilla plants dried to the extent that the fiber could not be extracted from the pencas (leaves). This was a period of great hardship for the community, but it managed to survive by maintaining costal production through the purchase of ixtle from various communities near rivers whose lechugilla had not dried out, by hiring out men to work in the irrigated fields near Ixmiquilpan, and by migratory wage labor to Mexico City.

At the opposite extreme, Zothe has suffered from floods. Since the milpas are located in the flood plains of the barranca, any unusual amount of rainfall is bound to flood some of the fields. Heavy rainfall in June, 1971 damaged a number of milpas just after the spring planting. Most of the farmers were able to replant after their fields dried out, but some milpas were completely washed out and deposited over with stones from the stream bed. The owners of these lands state they will cultivate their remaining milpas and continue with costales as before. One farmer who lost all of his milpas to the flood plans to seek work in Mexico City as soon as he can save enough money from the sale of ixtle to pay for his passage. Thw owners of the damaged milpas state that they will eventually

reclaim their land with the voluntary help of kin and neighbors.

In 1944 there was a flood of much greater proportions. It is reported to have rained nearly every day that September. As a result the entire barranca was flooded and formed a river several hundred yards across. Not only was the normal harvest destroyed, but travel to other areas became impossible because of rampaging streams cutting across the roads. The people in Zothe survived on nopal cactus and by slaughtering their herds of goats and sheep. After the flood waters receded they planted a late crop of wheat and brought in a harvest. They then mixed this grain with purchased maize to make tortillas.

There are irregular occasions when individuals need cash for special expenses that are beyond their immediate means. These include such things as funeral expenses, medical expenses, or the sponsorship of the fiesta of San Martin (up to 2,000 pesos for each of six mayordomos). In the case of a death, if the immediate household of the deceased cannot meet the expenses of the funeral the kin are likely to contribute until enough money has been collected. For other things, such as medical bills and fiesta expenses, loans are prevalent. Such loans are requested from kinsmen and may carry interest charges depending upon the closeness of the relationship.

From the preceding discussion it is evident that Zothe represents what Krupp would call a stable equilibrating system. The really significant fluctuations in economic factors have been environmental ones that primarily affected the local production of foodstuffs. During these periods the residents of Zothe adapt by relying on the production of costales or by taking temporary jobs in Mexico City. In a very real sense, the subsistence of the people in this small, rural Otomi community is directly linked to the national economy of Mexico.

The fact that subsistence is geared to a large extent to the production of costales, and that the most efficient organization for this production is a household with five or more workers helps to explain the rapid population growth in Zothe. The 1950 census reported 147 inhabitants, the 1960 census 315, and the 1970 census 396 inhabitants. As mentioned previously, the market for costales appears to have been steady for at least the past generation. If the demand for costales fell the impact on Zothe would be significant. Since the land alone cannot support the current population, and there are relatively few employment opportunities in the immediate area, the most likely result would be a migration to Mexico City on an unprecedented scale.

Some Theoretical Considerations

Formal economic theory is based on three basic assumptions according to Stigler (1946:63-4). These are that individuals know what they desire, know the technical means by which to attain these ends, and use this information to maximize the ends that they desire. The essence of this theory is that the individual exercises rational control over his economic activities and that he manipulates the economic system to his greatest benefit.

If this theory is applicable to all cultures, as the formalists insist, the question of why the natives of Zothe do not maximize their production of costales

should be asked. If they abandoned their agricultural activities and concentrated their efforts on costales they could double or triple their present cash income. It is true that the present level of lechugilla cultivation would not support such production, but there is considerable land in the monte zone that could be devoted to lechugilla, and the milpas themselves could also be utilized. There is some question as to whether the market would absorb such maximum production if all of the weavers were to attempt it, but so far, no weavers have adopted the practice of full time production except for short periods of time when they faced exceptional financial need (for example, to sponsor a fiesta, or to pay for medical expenses). Otherwise they produce enough to purchase food each Monday at the market and little more.

The following factors are suggested as partial explanations for this seemingly "uneconomical" behavior. Agricultural activities meet a number of social and psychological needs that are not met in the production of costales. Households function as autonomous units as far as making costales are concerned; there is no cooperative labor between them in regard to this activity. However, kinship is frequently recognized in agricultural work through help in planting or in repairing flood damaged fields.

The various stages of costal production, such as extracting the ixtle from the lechugilla, spinning, and weaving tend to be isolated individual activities requiring repetitive steps. Informants refer to them as tiring and boring; once, a man who was spinning called out to me and said, "Come talk to me so I won't fall asleep." On the other hand, working in the fields involves travel to different points within and frequently beyond the community, for milpas tend to be scattered as a result of the pattern of inheritance (a household works milpas inherited by both spouses). In the course of this travel many greetings, brief visits, and exchanges of pulque occur. Thus a great deal of social behavior is associated with those days of the weekly cycle that are set aside for working in the fields.

The people of Zothe also show considerable feeling for their fields and making things grow. This quality is not easy to quantify, but it becomes very real as one walks a high ridge with a farmer and he points to the fields of Zothe proudly and says, "see how green they are," and then points to another community without an irrigating barranca and with stunted maize and says "how sad it is there."

Economic behavior in Zothe therefore, is still enmeshed in the web of traditional social behavior and subsistence practices that are not conducive to a maximization of material gains. Although they make conscious decisions about their activities, the parameters within which such decisions are made are greatly limited by cultural factors at the level of the local community. The people of Zothe choose from a restricted number of patterns (see Table 4) and have not been quick to adopt new ones. Perhaps the fact that the local economic system has provided a relatively stable existence explains the low level of out migration. Working in familiar surroundings for a steady, if low, income apparently provides more security than working for a higher wage in Mexico City, where the standards of living actually may be no better than those in Zothe.

At some point in the past Zothe made the transition from a moneyless and

marketless primitive economy to a peasant economy. There can be little doubt that since that time there has been a continual process of syncretization and adaptation of the culture to the new realities of its economic existence. Dr. Maurilio Muñoz, Vocal Ejecutivo of the P.I.V.M., observes that the meat of a goat is no longer shared with extended kin as when he was a boy, and in Zothe interest is now often charged on loans to kindred. In broad perspective, however, the type of change that has occurred is that which Dalton refers to as "growth without development" in his three fold typology of socio-economic change (the other types of change being "degenerative" and "development"). The characteristics of growth without development are:

> The community's cash income grows somewhat because of its enlarged sales of crops or labor, but those structural changes in economy, technology, and culture necessary for sustained income growth and the integration over time of the local community with the nation, are not forthcoming (1969:77).
>
> ...adoption of cash-earning activities with little or no disruption of ordinary life and without concomitant technological and other innovations which diversifies and sustains income growth (Dalton 1969:71).

The growth that Zothe has experienced has been horizontal rather than vertical; the economy has supported a rapid increase in population, but has not elevated it beyond the subsistence level of existence.

Otomi Elites?

Early (1969:80) views the wealthy families of San Andres as constituting an "Otomi elite" who "live in Western stone houses, wear mestizo dress, and send their children to high school and university in Ixmiquilpan and Mexico City." In Zothe, three households are recognized as having greater wealth in that they own more than 20 milpas apiece. They live in stone houses and wear mestizo dress, but most houses in Zothe are of stone and all men in Zothe wear mestizo clothing (cotton pants and shirts purchased at the Ixmiquilpan market, nonconical sombreros, and huaraches-sandals). All members of the wealthier households engage in the same work activities (plowing, digging ditches, weaving, grinding maize, collecting aguamiel) as do the members of other households. Of the two youths now attending secondary school in Ixmiquilpan, one is of the wealthier group. Thus, while the wealthier families in Zothe do possess more material goods in the form of land and livestock, their overall lifestyle is very similar to that of their less wealthy neighbors and kin. The use of the term "elite" suggests a degree of social stratification with concomitant differences in division of labor, prestige, and social behavior. The few relatively wealthy families of Zothe do not appear to constitute an elite of this type. Furthermore, their accumulation of material goods will be divided evenly and scattered by inheritance in the next generation. Some differences among families do exist, but in general terms the society may be described as relatively homogeneous in comparison to societies with definite class stratification.

Conclusion

Zothe is a rural Otomi community in the semi-arid Mezquital Valley of the

state of Hidalgo in Mexico. It is located along a stream bed that is the primary determinant of land use patterns and which provides occasional water for the irrigation of fields. Although all households participate in agricultural activities, the community is not self-sufficient in food production due to low rainfall and a scarcity of arable land.

Nevertheless, the community has been able to support a rapid growth in population through the production and marketing of costales. The economy is a peasant type economy that has experienced overall growth, but little structural development, hence the standard of living remains near the subsistence level. The society is a relatively homogeneous grouping of production oriented households linked through kinship.

Areas for Future Research

1. This paper has suggested that the maximization of costal production could lead to significantly greater cash earnings in Zothe. However, the possible environmental or marketing limitations on such production bear further study. The potential for expansion may be restricted by factors not taken into consideration.
2. The people of Zothe refer to the making of costales as their "oficio," and state that other communities have other oficios, such as making ayates or pulque. The distribution of oficios and their relationship to the marketing centers bears analysis.
3. Ellen Rafferty, a student anthropologist in the Field School assigned to a neighboring community, reports that patrilocality is not prevalent there as it is in Zothe. This particular community has less agricultural potential than Zothe because no stream bed passes through it. Also, the households are not organized around the production of costales. Can the reported absence of patrilocality be explained on the basis of land use patterns and economic organization?

Table 1: The Yearly Work Cycle

Month	Activities
January-February	Little agricultural work. Increased costal production and migratory wage labor to Mexico City. Repair tools.
March	Harvest habas (lima beans).
April-May	Repair borders between milpas. Migrants return for planting.
June	Plowing. Planting of maize and frijoles. Much activity in milpas, costale production drops.
July	Clearing irrigation ditches, irrigation when water is in barranca, weeding, repairing barriers to keep animals out of milpas.
August-September	Second plowing of milpas, weeding, irrigation, mass given in Santuario in supplication for rain (mid-August).
October-November	Harvest maize and frijoles.
December	Dry corn stalks 20 days (for animal fodder) and store in mesquite trees, plant habas.

Table 2: Duration of Locally Grown Maize for Tortillas for Two Families

	Average Family of 8 With 6 Milpas	"Wealthy" Family of 17 With 22 Milpas
1961	No Harvest--Drought	No Harvest--Drought
1962	"	"
1963	"	"
1964	"	"
1965	"	"
1966	"	"
1967	"	"
1968	1 Month	-
1969	2 Months	12 Months
1970	1 Month	5 Months

Table 3: Division of Labor in the Production of Costales

	Step	Participants
1.	Planting lechugilla ("lariata bueno," "shamni")	Men and boys
2.	Cutting penca (leaf)	Men, boys, women
3.	Tallando (extracting ixtle)	Men and boys
4.	Penando (combing ixtle)	Women and children
5.	Hilando (spinning): Turning wheel	Children
	Feeding ixtle to wheel	Men and women
6.	Telando (weaving)	Men and adolescent boys
7.	Sewing liensos (halves)	Women
8.	Marketing costales in Ixmiquilpan	Men

Table 4: Economic Activities and Labor Specialization in Zothe

Activity	Participation
Agriculture	Nearly universal
Making costales	Nearly universal
Wage Labor:	
Agriculture (peon)	Two men fulltime, other men and boys occasionally
Mexico City (usually as a peon in construction work)	Four men fulltime, others seasonally or to pay debts
Mechanic's apprentices at the "Taller" in Cardonal	Two men fulltime
Teachers (employed in Zothe, not natives)	One man, one Woman
Embroidery sales through Jamadi store	Fifteen women and adolescent girls
Selling pulque	Three households
Operation of Tienda (store)	One household
Other part time specializations:	
Boot maker	One man
Peluquero (barber)	Three men
Chofer (truck driver)	Two men
Musicians (paid at fiestas)	One man and his two sons
Castration of pigs	One man
Partera (midwife)	Two women

Table 5: The Flow of Energy for Subsistence Activities in Zothe, Hidalgo, Mexico (Symbols explained in Table 6).

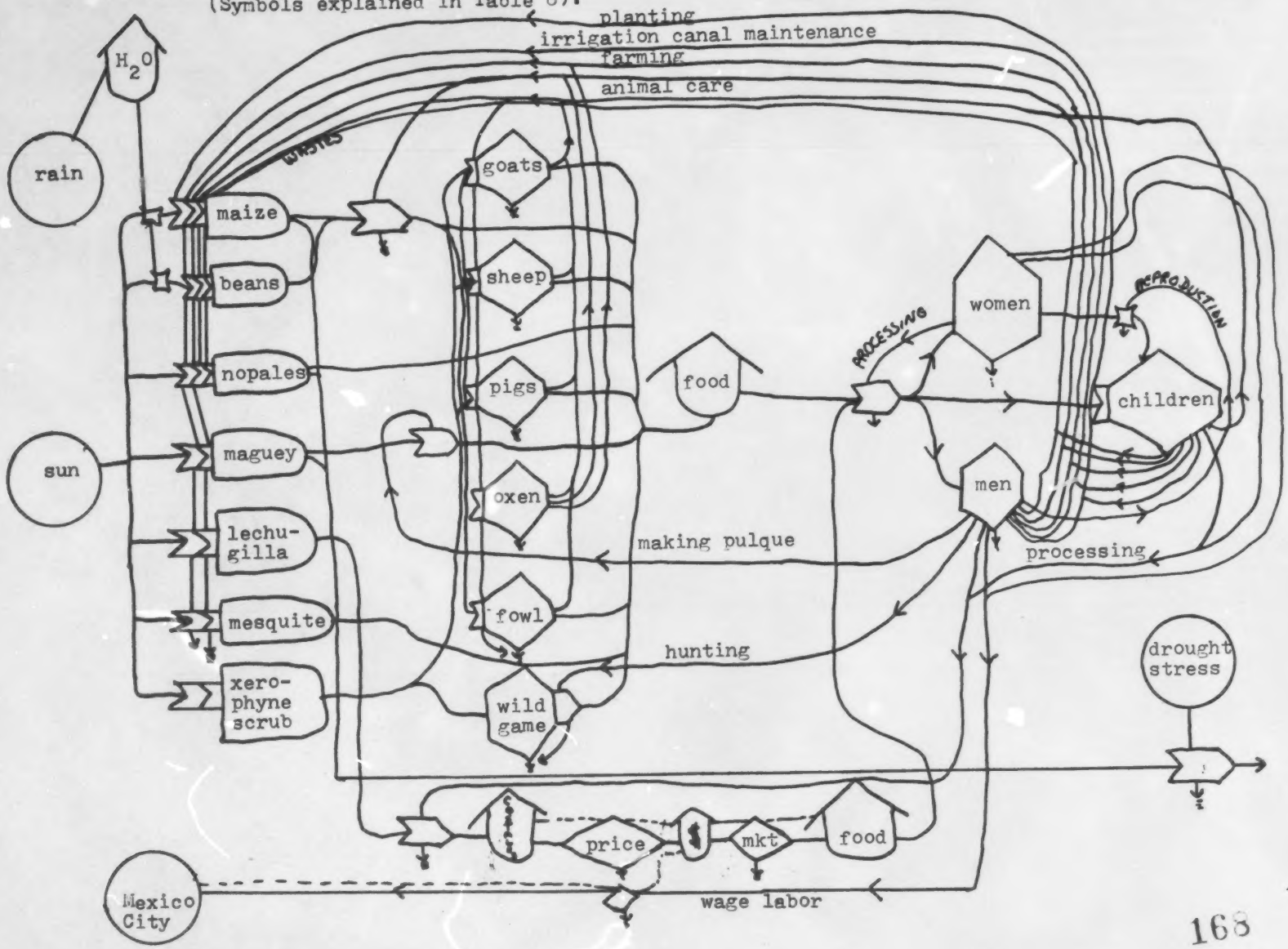
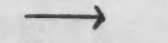


Table 6: Symbols for the Energetics of Environmental Systems (Adapted from Odum 1971:38-9).

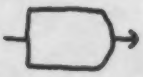


Flow of Energy

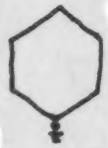
Energy Source

Passive Storage Module; indicates the position of storages in the system.

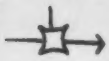
Heat sink; all processes lose some potential energy in the form of heat.



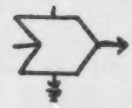
Cycling Receptor (Plant Population); captures energy which is passed to Self Maintaining Modules.



Self Maintenance Module (Consumer Population); stores potential energy and feeds back work functions on subsystems.

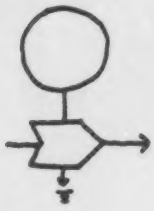


Switching Function; some energy flows have on and off states that perform switching functions on other flows.



Work Gate Module; one flow of energy (control factor) makes another possible (input-output).

Economic Transaction Module; indicates money cycle in energy systems. Money flows in the opposite direction of energy.



Stress Symbol; indicates the drain of potential energy from the system when it is stressed by environmental factors.

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EL PATRÓN DE ASENTAMIENTO EN UN PUEBLO OTOMI: RELACIONES ESTRUCTURALES ENTRE MANZANAS.

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Socio-economic correlates of settlement pattern are examined in an Otomi village. Community settlement follows the dispersed pre-Columbian pattern. During the last twenty years a central colony has been forming, concentrated around the church, school, and water supply. A comparison between those living in the central nucleated colony and those dispersed in manzanas (outlying neighborhoods) shows marked differences. Those living in the colony possess in general a higher standard of living than those in the manzanas. Structural relations between manzanas are exhibited in marriage alliance and cooperation in religious fiestas. Specific pairs of manzanas combine during fiesta week to celebrate the municipal fiesta. A kind of religious kula exists with responsibility for fiesta cargos circulating in regular fashion from one manzana to the next. These fiestas provide opportunities for social interaction between manzana members, thus marriage alliance tends to coincide with ritual alliance between manzanas.

Introducción

El objeto de este trabajo es primero dar una idea de la situación actual, en que se encuentra un pueblo del Valle del Mezquital, "Panales;" segundo, estudiar algunas de las causas de su patrón de asentamiento.

Tecnicas De Campo

Mi llegada a Panales fué seguida por un recibimiento de algunas autoridades del pueblo, a las que fuí introducida por conducto del director de la escuela de trabajo de campo. Se explicó que era estudiante de Antropología, interesada en conocer su forma de vivir y se les agradeció de antemano cualquier ayuda que pudieran ofrecerme. Permanecí por un día en la casa de la familia del maestro de sexto año de primaria, mientras me acondicionaron un cuarto en la escuela, donde permanecí durante seis semanas.

El método que utilicé para realizar este trabajo, estuvo basado principalmente en la observación y en entrevistas estructuradas y no estructuradas. Consideré conveniente comenzar a conocer la organización política del pueblo por lo que entrevisté a 15 personas de los diferentes puestos políticos, aprovechando ésto también para aclarar cuál era mi papel dentro del pueblo, era un estudiante que venía unicamente a aprender de ellos, para conocerlos. Para tener una idea de la situación económica del pueblo, entrevisté a 6 gentes de diferentes ocupaciones. Posteriormente me interesó el patrón de asentamiento del pueblo, la concentración de 40 casas alrededor de la iglesia y la escuela y el resto del pueblo en casas en forma dispersa. Comencé a ver el porqué las gentes localizadas en casas dispersas, no venían a formar parte del conglomerado de casas agrupadas en el centro, donde podían tener mayores servicios.

Para conocer esto, realicé entrevistas estructuradas con un 20% de la población.

Estas entrevistas fueron estructuradas con la ayuda de algunos de los estudiantes de Panales y 3 profesores del pueblo. Encontré la gran importancia de las relaciones sociales que existen entre los vecinos del pueblo y empecé a ver qué importancia podían tener estas relaciones para el patrón de asentamiento. Para conocer esto hablé con los mayordomos (gentes encargadas de las fiestas religiosas), quienes me informaron cuestiones relacionadas con las fiestas. Tambien con este fin realicé sociogramas. Mucha de mi información fue obtenida de datos recopilados por las autoridades o maestros y también por la información de las personas que han promovido muchos de los "cambios" de Panales, quienes fueron mis mejores informantes.

I. Visión General Del Pueblo

Localización.-

El pueblo de Panales se localiza en la parte sureste del Municipio de Ixmiquilpan a 5,400 m. de la carretera México-Laredo. Está rodeado por varios poblados. Al norte, el Barrio de Progreso y la comunidad de López Rayón; al sur, la Comunidad de Yonthe Chico y Barrio el Dexthi de Alberto; al oriente, la comunidad del Maye y el Barrio de Reforma; al poniente, con la comunidad de Taxhie y el poblado de López Rayón. El pueblo esta dividido en 7 manzanas: Dajuy, Quiterio, Garambullo, Palma, San Juan, Ye y la Colonia. En la colonia se encuentra la escuela, la iglesia, el juzgado auxiliar, el monumento a la bandera, los lavaderos, los hidrantes principales de agua potable y la concentración de 40 casas.

Situación económica.-

Se debe hacer notar que Panales, al igual que cualquier otro poblado indígena, no se encuentra al margen de los problemas del país, sino que su situación es el resultado de ser parte de un país capitalista subdesarrollado con ciertas relaciones sociales de producción.

Sus habitantes, los otomíes, forman una clase social que está en contacto con el resto de la población en un tipo de relaciones económicas y sociales, producto de un proceso histórico que data desde la época prehispánica con la sujeción de los otomíes al imperio Mexica. "Ainsi au début du XVI^{e} siecle, l'inmense majorité des otomis est incorporée a la confederation aztèques et un petit nombre d'entre eux a l'Etat de Tlaxcala, l'hegemonie nahuatl s'est imposée a eux" (Soustelle 1937: 472).

"La organización de los indígenas otomíes estaba basada fundamentalmente en las repúblicas de indios que a su vez eran controladas por los ayuntamientos españoles. Esta situación les obligó a guardar una posición dentro de la sociedad completamente controlada y supeditada a la voluntad de españoles y criollos en todos los aspectos de la vida" (Zavaleta Arellano 1966:613).

Posteriormente con la conquista vino la incorporación del indígena al sistema capitalista.

"El mundo económico indígena no es un mundo cerrado. Las comunidades indígenas sólo están aisladas en apariencia. Por el contrario están integradas en sistemas regionales y en la economía nacional. Los mercados y las relaciones comerciales representan el eslabón principal entre la comunidad indígena y el mundo de los

ladinos, es decir, la sociedad nacional. Es cierto que la mayor parte de la producción agrícola de los indígenas es consumida por ellos. También es cierto que el ingreso generado por los indígenas sólo representa una proporción mínima en el producto nacional... Pero la importancia de estas relaciones no se encuentra en la cantidad del producto comercializado, o en el valor de los productos comprados; se halla más bien en la calidad de las relaciones comerciales. Estas son las relaciones que han transformado a los indios en una minoría, y que los han colocado en el estado de dependencia en que se encuentran actualmente" (Stavenhagen 1965: 17-18).

"El comercio es controlado por la población no indígena quienes imponen sus condiciones a la población indígena. Sin embargo hay una interdependencia, debida a las relaciones de producción, entre la población no índigena y la indígena..." (Nolasco 1966:652).

La economía de Panales está intimamente ligada a su cabecera municipal con la que sostiene relaciones de producción no equitativas que le impiden mejorar su economía precaria y le dan poca mobilidad social. La superficie total de Panales es de 2801 Ha., encontrandose 600 Ha. de agostadero y tierra cerril, 25 Ha. de comunal y 1,176 de pequeña propiedad. De estas tierras solamente se tienen 25 Ha. de riego que se encuentran divididas entre 150 "ciudadanos," tocándoles unicamente un cuartillo (1000 m.) a cada uno. En las tierras de riego se siembra principalmente maíz y frijol, cosecha que abastece a una familia por 2 meses. Estas tierras fueron beneficiadas con la construcción de la Presa Felipe Angeles que se inició en 1962, bajo el gobierno de López Mateos. En las tierras de temporal laborables, debido a su baja calidad y a la escacez de lluvias en la región, unicamente se siembra maguey y algunos nopales.

Los productos de estas plantas se utilizan casi únicamente para el autoconsumo y en las pocas ocasiones en que se vende del maguey el pulque o del nopal la tuna, es generalmente con grandes desventajas para el vendedor.

Debido a la escasez de trabajo en el poblado, los hombres se ven en la necesidad de buscar fuentes de trabajo fuera de él, generalmente en Ixmiquilpan, recibiendo salarios muy bajos.

Las ocupaciones que se encuentran son las siguientes:

TABLA 1

PORCENTAJE DE LOS HOMBRES DE PANALES POR OCUPACION

Jornaleros:	58.4%	Panaderos:	2.1%
Albañiles:	22.8%	Campesinos:	2.1%
Cantereros:	5.9%	Maestros:	1.6%
Obreros:	3.3%	Comerciantes:	1.2%
Soldados:	1.0%		

Complementan su economía con la cría de animales domésticos que cuando necesitan dinero los venden, y con el tejido de ayates que realizan las mujeres quienen tejen alrededor de tres ayates a la semana los cuales venden de $3.00 a $5.00 la pieza.

"...la fibra, es la que constituye la riqueza más grande del Mezquital. Un montoncito de ella sobre la espalda y un huso en la mano parecen partes inertes del cuerpo del hombre o de la mujer otomíes, porque, bien sea caminando o a lo largo de

los caminos, o en el mercado, o asistiéndo a una fiesta, es siempre hilando como ellos aparecen"(Sejourné 1937:19).

Organización Política.

Este pueblo tiene distintas autoridades y varios comités. La autoridad principal es el juez propietario, quien tiene poder ejecutivo y judicial. Es nombrado por el pueblo en una asamblea general y permanece en el puesto durante un año.

Los jueces auxiliares de la, 2a, 3a, quienes colaboran y representan cuando es necesario al juez propietario, son nombrados directamente por él y ocupan el cargo durante un año.

El comisario comunal quien administra todo lo referente a tierras es nombrado por asamblea general en presencia de un representante de la SAG.

Un comandante y dos policias, se encargan de mantener el orden. Así cuando hay algún desorden ellos son los encargados de llevar al culpable ante el juez. También pueden aprehender a una persona por mandato del juez, cuando no ha cumplido en varias ocasiones con sus faenas o cuando debe algún pago.

Hay dos comisionistas que tienen que estar en contacto con el juez para que cualquier asunto que se necesite comunicar o informar al pueblo, vayan ellos a avisar a los baristas.

Los baristas son 13, 2 en cada manzana y uno en la colonia, estos deben avisar a cada uno de los vecinos lo que les comunican los comisionistas.

Existe tambien un presidente de educación con 6 vocales. Sus funciones son las de ver el buen funcionamiento de la escuela; estar en contacto con los maestros para ayudarlos en lo que se necesite; convocar a juntas de padres de familia, cuando sea necesario; recoger cuotas y supervisar la asistencia de los alumnos.

Mediante esta organización y la fuerte solidaridad que se ha ido creando en el pueblo, se han logrado las pocas mejoras que tiene, aprovechándose de la menor coyuntura que les ofrece el sistema para que les otorguen algo. Sin embargo las decisiones de importancia vienen dadas por las autoridades de la cabaceria municipal.

Organización Religiosa.

En Panales tienen lugar tres fiestas religiosas importantes en el año: La del 29 de septiembre, fiesta de San Miguel, patrón de Panales; el 15 de agosto, la fiesta del patrón de Ixmiquilpan, "Señor de Xalpa;" y la fiesta del carnaval que es movible. En cada una de estas fiestas participan cuatro mayordomos de cada manzana, quienes son elegidos por la manzana o se proponen voluntariamente. Existe entre ellos una jerarquización, el primero es el responsable directo del cargo. Los gastos de los mayordomos aproximadamente ascienden a lo siguiente:

TABLA 2

GASTOS DE UN MAYORDOMO POR UNA FIESTA PRINCIPAL

Articulos	Valor en pesos
1 res	$1,300.00
18 gallinas	450.00
3 chivos	210.00
10 cartones de cerveza	270.00
2 cajas de refrescos	40.00
3 barriles de pulque	144.00
2 botellas de bebida	40.00
5 cuartillos de maiz	25.00

Articulos	Valor en pesos
10 kg. de manteca	$ 110.00
2 kg. de chile ancho	56.00
1 kg. de chile pasilla	18.00
1 kg. de chile verde	18.00
1 kg. de chile huajillo	25.00
3 kg. de arroz	12.75
5 kg. de frijol	25.00
especies	20.00
pan	10.00
10 kg. de azúcar	23.00
2 kg. de café	24.00
TOTAL	$3,110.75

Esta cantidad multiplicada por los cuatro mayordomos da un total de $12,443.00. Además de esto tienen que comprar, flores, cohetes y cera. En total de los cuatro esto suma unos $900.00.

Los vecinos también tienen que cooperar con una cuota de unos $40.00 y alimentos.

TABLA 3

GASTOS DE LOS VECINOS POR UNA FIESTA PRINCIPAL

Articulos	Precio en pesos
1 chivo	$75.00
10 gallinas	50.00
½ barril de pulque	24.00
3 cartones de cerveza	88.00
½ kg. de café	6.00
3 kg. de azúcar	8.90
3 cuarillos de maíz	15.00
1 kg. de manteca	11.00
chiles varios	35.00
especies	8.00
1 kg. de arroz	3.25
1 cuartillo de frijol	5.00
TOTAL	$469.10

Esto es un cálculo de los gastos en las dos fiestas mayores, en las cuales además se gasta las cosas que le corresponden a cada manzana según los cargos que tengan. Los de la cera, coopera cada vecino con dos kg. de cera ($56.00) y da una cuota de $35.00 para comprar cirios y velas escamadas. La manzana encargada del castillo, tiene que cooperar para comprar dos castillos que cuestan $5,000.00. La manzana de la misa manda hacer 3 misas de 3 ministros con un costo de $200.00 cada una. Existe además una cooperación de las manzanas que no tienen cargos de $2.00 para la misa. Estos gastos variaran de acuerdo con las manzanas, ya que unas se lucen más que otras.

Como se puede observar los gastos en estas fiestas son tremendos y recae un fuerte peso en los mayordomos, por lo que tienen éstos que ser personas que se encuentran en una mejor situación económica que los demás. Estas personas gastan aquello que tienen acumulado y además, como los gastos son muchos, se ven en la necesidad de pedir prestado a vecinos y después de terminar con su cargo ir pagando la deuda contraída.

Estos cargos tienen su sentido como redistribuidores de la riqueza y la adquisición de un status de prestigio. "El desempeño de cargos en el gobierno de la comunidad, bien sea en la esfera secular o en la religiosa, obliga a las personas

que han acumulado bienes de capital en cuantía superior a lo permitido, a redistribuirlos al través del despilfarro de una mayordomía..." (Aguirre Beltran: 1967: 132). "La función redistributiva que tiene a su cargo la estructura politica, actúa como apropiado mecanismo para convertir el excedente económico en posición social" (Aguirre Beltran 1967:206). Es interesante observar que en algunos pueblos del Valle del Mezquital, estas costumbres se estan perdiendo, o ya se han perdido. En el momento en que sus habitantes adquieren una situación económica mejor, empiezan a tener una mente capitalista, es decir empiezan a invertir su dinero pensando en mayores ganancias y en una acumulación de capital. Esto empieza a vislumbrarse en Panales, donde en no mucho tiempo se cambiarán las costumbres de estas fiestas.

II El Factor del Patrón de Asentamiento en Panales

En los poblados indígenas se observará en gran número de casos que el patrón de asentamiento es disperso. En el Valle del Mezquital, esto es común. Encontramos gran número de comunidades en las que únicamente se encuentra la iglesia y la escuela, si la hay, y todas las casas dispersas, separadas por grandes extensiones de terreno deshabitado. Esto parece ser una característica de los otomíes desde la época prehispánica, según se nos relata.

"No están poblados...en pueblos formados sino esparcidos en lugares muy ásperos, sin policías, sin orden ninguno, sino por las quebradas como a cada uno se le antoja" (Carrasco Pizana 1950:138). "...Techotlallatzin a los (otomies) que caían hacia las tierras y provincias de Texcoco les mandó que de allí adelante no viviesen dentro de las ciudades y pueblos sino fuese en las aldeas y montes acomodados a su propósito...Este fin tuvieron los otomies los cuales jamás a Techotlallatzin le cuadró que esta nación viviese dentro de las repúblicas por ser gente vil y apocada" (Carrasco Pizana 1950:91).

Panales, como había mencionado, tiene seis manzanas y la colonia. Las manzanas equivalen a lo que en otros poblados llaman barrios y que parece ser tienen su origen en los calpules (tipo de organización prehispánica). "Todas estas gentes vivían en pueblos y barrios que ellos llaman calpules" (Carrasco Pizana 1950:87). Según el mismo Zorita: un calpul era "barrio de gente conocida o linaje antiguo que tiene de muy antiguo sus tierras y términos conocidos que son de aquella cepa, barrio o linaje; y las tales tierras llaman calpulli que quiere decir tierras de aquel barrio o linaje" (Carrasco Pizana 1950:88, citando Zorita 198).

La colonia es algo reciente, lo primero que se construyó donde hoy es la colonia fue una iglesia, terminándose en el año de 1870. En 1949 se construyó la escuela por iniciativa del Monte de Piedad. En 1954 la Misión Cultural de la Secretaría de Educación Pública, ayudó promoviendo la urbanización alrededor de la escuela y la iglesia. Proporcionó asistencia técnica y acarreo de material, construyéndose 15 casas. Posteriormente en 1959 se gestionó y se consiguió la ayuda del PIVM (Patrimonio Indígena del Valle del Mezquital), poniendo éste, material, acarreo y asistencia técnica para la ampliación de casas. En 1958 comenzó a funcionar el agua potable, que anteriormente se acarreaba de un manantial, localizado a 5 km. del centro del pueblo. En 1969 se instaló la luz eléctrica por la Cia de Luz y Fuerza Motiz.

No obstante todos estos "cambios", la gente en gran parte ha preferido seguir viviendo dispersos en sus manzanas, argumentando como factor principal que en la colonia no pueden andar libres los animales y si lo estan, hay pleitos con los vecinos, ya que los animales pueden causar algún daño en sus propiedades.

Esta es una razón muy importante, ya que los animales forman una parte esencial de su economía; pero además existen otros factores de tipo económico y de tipo social.

TABLA 4

COMPARACIÓN SOCIAL-ECONOMICO ENTRE LA COLONIA Y LAS MANZANAS

Economica	Colonia	Manzanas
Tierra	donada o comprada	heredada
Parcelas de riego	36, o sea el 24% del total, tocándole al 78% de sus ciudadanos	Dajuy=25, 16% del total, tocándole al 59% de sus ciudadanos Quiterio=21, 14% del total tocándole al 55% de sus ciudadanos Garambullo=30, 20% del total, tocándole al 83% de sus ciudadanos Palma=15, 10% del total, tocándole al 57% de sus ciudadanos San Juan=17, 11% del total tocándole al 58% de sus ciudadanos Ye=6, 3% del total, tocándole al 22% de sus ciudadanos.
Sueldos	de 46 que trabajan 13=$300 a $400 24=$500 a $600 3=$700 a $850 4=$1000 a $1500 3=$2000 a $3000	Dajuy de 42, 27=$300 a 400 13=$500 a $600 2=$700 a $850 De 37 en Quiterio 22=$300 a $400 15=$500 a $600 De 36 en Garambullo 26=$300 a $400 9=$500 a $600 1=$700 a $850 De 26 en Palma 19=$300 a $400 6=$500 a $600 1=$700 a $850 De 27 en San Juan 25=$300 a $400 2=$500 a $600 De 22 en Ye 21=$300 a $400 1=$500 a $600
Agua	5 hidrantes domiciliarios	0
Luz	el 100% la tienen	60% la tiene
Comercios	4 100%	0
Casas	De cantera, con techo de tepetatillo. La cocina - formando parte de la casa y hecha de cantera	Algunas de cantera y otras de palma. La cocina separada de la casa, y hecha de piedra y palma
Baños	3	0

Economica	Colonia		Manzanas	
Personas con dos casas	7			
Arrenditarios	4		0	
Televisión	3	75%	1	25%
Coche	3	100%	0	
Estufas de gas	6	100%	0	
Estufas de petróleo	5	100%	0	
Máquinas de escribir	2	100%	0	

Social		
Autoridades	Juez Propietario	Juez de la instancia
	Comisariado Comunal	Juez de 2a "
	Comisionista	Juez de 3a "
	Baristas	Comandante
	4 comités	Policias
		Comisionista
		Baristas
		2 comités
	Mayordomo más importante (fiesta con mayores gastos)	Mayordomos menos importantes

Nivel educativo
De 72 alumnos que han salido de la primaria de Panales desde 1967 a 1971 han continuado la secundaria 15:

	12	3
Que no han hecho la primaria aquí o en estos años pero han continuado estudiando:		
Secundaria	6	4
Normal	4	0
Universidad	3	0
Maestros promotores	3	0
Maestros normalistas	1	0

Con esto se puede observar que en términos generales, las personas de la colonia tienen un nivel de vida superior al de las personas que habitan en las manzanas.

Relaciones entre Manzanas

Las relaciones entre menzanas se manifiestan en las reglas del matrimonio, y las fiestas religiosas caractizadas por la circulación de cargos religiosos.

A. Reglas del Matrimonio

"La familia otomí...es de tipo nuclear, monogámica, con descendencia ambilateral, con endogamía de grupo y residencia neolocal" (Nolasco 1966:653). La endogamía se encuentra en las manzanas y se ha perdido en la colonia en gran medida como lo demuestra la siguiente tabla.

TABLA 5

PROCEDENCIA DE LAS ESPOSAS DE LA COLONIA Y DE LAS MANZANAS

Colonia	Manzanas
De 35 5 de fuera, 7 de Quiterio, 5 de Garambullo, 4 de San Juan, 4 de Ye	De 33 de Dajuy 15 de Dajuy, 7 de Quiterio, 3 de Palma, 3 de Garambullo, 1 de San Juan

Colonia	Manzanas
	De 29 de Quiterio 13 de Dajuy, 5 de Quiterio, 5 de Garambullo, 3 de Palma, 3 de fuera.
	De 25 de Palma 16 de Palma, 1 de Dajuy 3 de Garambullo, 5 de fuera
	De 20 de San Juan 7 de San Juan, 3 de Dajuy, 2 de Ye, 2 de Garambullo y 6 de fuera
	De 34 de Garambullo 21 de Garambullo, 5 de Quiterio, 3 de Dajuy, 2 de Palma 3 de fuera
	De 16 de Ye 10 de Ye, 2 de San Juan y 4 de fuera

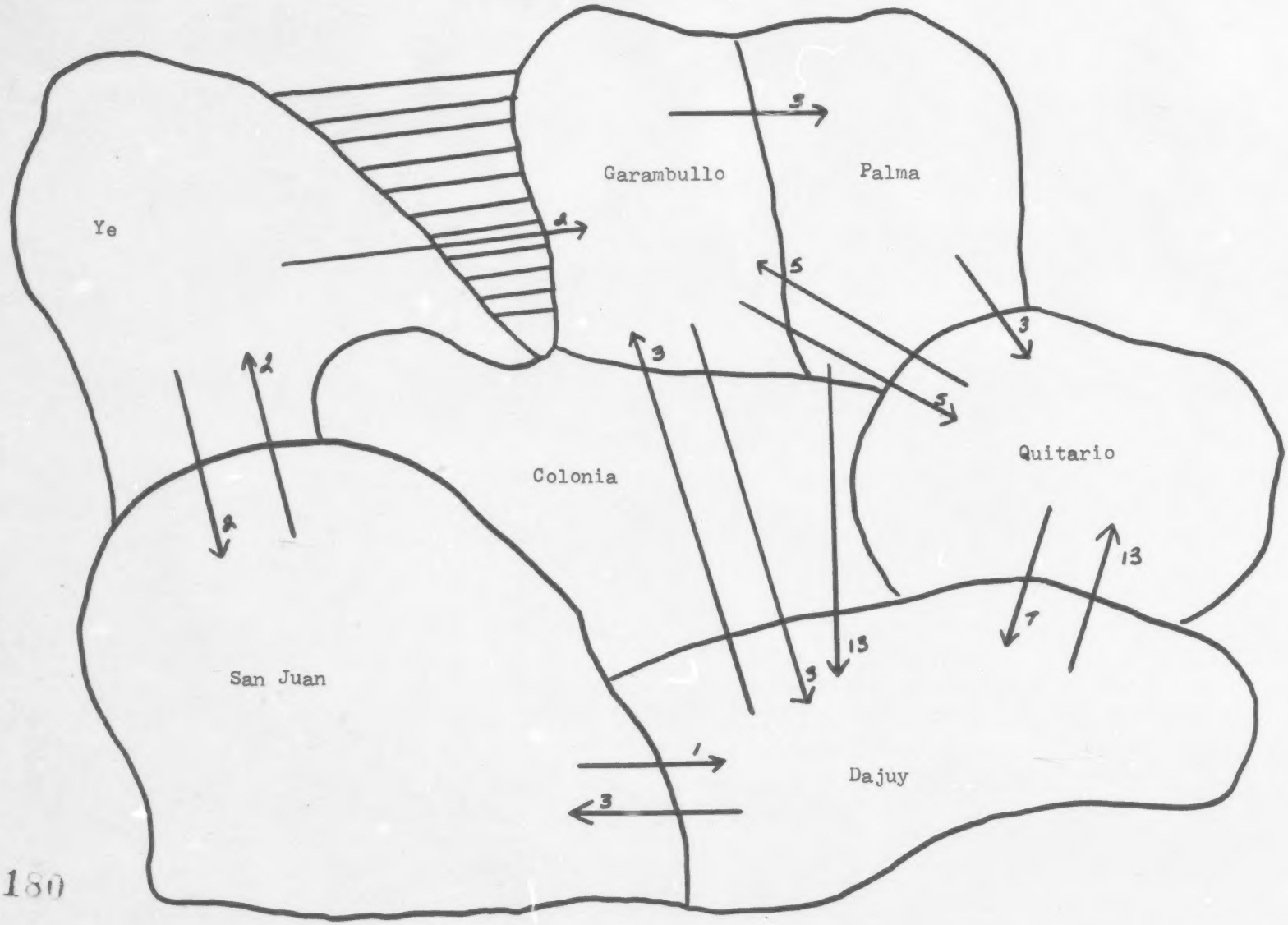
B. Fiestas Religiosas

Desde el 13 de agosto hasta el 7 de septiembre se celebran las fiestas para el Señor de Xalpa, patrón de Ixmiquilpan, a quien se le rinde culto desde 1545. En esta fiesta intervienen 2 manzanas, San Juan y Ye, luego otras 2, Dajuy y Quiterio y, por último, Garambullo y Palma. Cada par hace su fiesta por separado, siempre son los mismos pares y en las mismas fechas.

Por estar alli en esta época, tuve la oportunidad de observar la fiesta de las manzanas de San Juan y Ye. El día 13 de agosto se inició la fiesta en la manzana del Ye. Con música y la asistencia de los vecinos de la manzana se llevaron a la iglesia flores de sempasuchitl y de cera, se les hizo la señal de la cruz y se llevaron a la casa del mayordomo. En casa del mayordomo se colocaron en un cuarto dos cajas grandes de madera conteniendo ceras que se habian juntado con la cooperación de la manzana y que en parte se usan para la fiesta o para la peregrinación a Ixmiquilpan el día 7 de septiembre. Las cajas de madera, se cubrieron con unas fundas de tela bordadas con flores y en el suelo se colocaron varios cientos de flores de sempasuchitl. Cerca de las cajas había una armazón de madera com puesta de un palo horizontal y uno vertical, de los extremos de la parte horizontal se colgó una especie de collar de varios hilos de flores de cera y se le llama coladera. Al cuarto entraban a tocar los músicos y los rezanderos a cantar alabanzas. Ese día asistió poca gente de la manzana y unicamente se les dió comida a la música y a sus acompañantes.

El día 14 a las 8 de la mañana se celebró una misa en la iglesia del pueblo a la que asistieron los de la manzana del Ye y algunos de San Juan. Desde la salida de la casa del mayordomo hasta la entrada a la iglesia por la puerta principal, la música estuvo tocando sin parar. Antes de que llegara el sacerdote los mayordomos entraron con canastones de flores; a su lado venían dos muchachas de cada lado con flores colocadas en unos jarritos y ceras rodeadas de flores. Venía también una señora con un incensario que tenía copal encendido. Las personas que llevaban las flores se hincaron cerca del altar, hicieron la señal de la cruz sobre las flores, las subieron y bajaron tres veces, como ofreciéndolas, luego las besaron. Esto lo hicieron volteándose a cada uno de los puntos cardinales y termi-

TABLA 6 PROCEDENCIA Y NUMERO DE ESPOSAS ENTRE LA COLONIA Y LAS MANZANAS



172

naron con una vez más en el punto donde empezaron. Despues los hombres fueron colocando flores en el altar y alrededor de todas las cruces e imágenes.

Una vez terminada la misa, se inició con música el recorrido hasta Ixmiquilpan, donde tuvo lugar la misa de 12, mandada hacer por la manzana del Ye. Encabezaba la peregrinación el que llevaba la colgadera y después los de las flores seguidos por la música y los vecinos. Al llegar a la iglesia, la procesión se paró frente a una cruz que está a la entrada y despues de hacerle la señal de la cruz a una corona de flores, se la colocaron. En la iglesia, mientras empezaba la misa, se colocaron dos ceras grandes y dos más chicas, adornadas con flores de cera, frente al altar. Se subió hasta donde está la cruz y se cambio la colgadera que había por la de Panales. Esta colgadera era de López Rayón. La colgadera de Panales se la lleva al otro día y asi sucesivamente. Despues de la misa se organizó en Panales una comida y baile que terminó hasta la madrugada.

El día 15 se lleva a cabo el cambio de mayordomías. Los mayordomos de San Juan acuden a Ye y, juntamente con los mayordomos de Ye, pesan toda la cera y se hace una lista de todas las personas que cooperaron para esta cera y el peso total de la misma. Esto fue firmado por todos los mayordomos. A ésto siguió la ceremonia de entrega, en la que los mayordomos de las dos manzanas fueron unos dando y otros recibiendo el cargo. Primero se hincaron los mayordomos principales de las dos manzanas, se estrecharon las manos y se las besaron mutuamente, se pusieron la mano sobre el hombro e inclinaron su cabeza de un lado y del otro del hombro de su compañero y se entregaron el papel y las llaves; el que entregaba les tenía que decir el cuidado que debía tener con eso y las responsabilidades de su cargo. Esto lo hicieron los cuatro mayordomos en orden de acuerdo con su rango.

Afuera esperaban los vecinos de la manzana de San Juan con canastas llenas de botellas de distintas bebidas alcohólicas y cigarros. Al salir los mayordomos, todos los vecinos de la manzana de Ye se formaron y los de San Juan fueron pasando ofreciéndoles bebidas y cigarros, cada vecino de San Juan a cada vecino de Ye. Una vez que terminó el brindis, hubo una gran comida en la que comieron todos los vecinos de las dos manzanas. Más tarde se llevaron las cajas de cera a la manzana de San Juan y se colocaron en casa del mayordomo principal. Aquí se dió otra comida y hubo baile hasta la madrugada.

C. La Circulación Entre Manzanas de los Cargos Religiosos

Las relaciones entre las manzanas están dadas por las fiestas religiosas principalmente. En la fiesta del carnaval y del 29 de septiembre, "San Miguel," tiene cada manzana un cargo diferente. A una manzana le toca encargarse de la misa, o otra de la cera, a otra de los castillos (cohetes); a una más de la música; las manzanas restantes cooperan con la manzana de la misa. Los cargos se van rotando cada año, así, al que le tocó la misa, al año siguiente le toca la cera, al que le toca la cera, al siguiente el castillo y así hasta que pasan en cada manzana los cuatro cargos. La rotación siempre es igual: empieza con Dajuy y termina en la colonia; antes de que existiera la colonia la rotación terminaba en San Juan y era en círculo.

Existe una fuerte relación entre el número y la procedencia de esposas y manzanas con relaciones fiestales. La circulación de esposas tiende a coincidir

con la circulación de los cargos religiosos. Son pues estas fiestas, en las que los distintos vecinos se visitan y se relacionan entre sí las que nos permiten ver los lazos estructurales de las manzanas. Así todo esto, unido con los factores económicos, son algunas de las causas por las que las personas permanecen en sus manzanas.

Conclusión

En estas seis semanas, no se trató de obtener grandes hipótesis antropológicas, sino únicamente aprender los medios más adecuados para estudiar la realidad de los fenómenos sociales. Sería de mucho interés profundizar en el estudio de las fiestas de este pueblo, viéndolas como un fenómeno socio-económico, no sólo de esta comunidad, sino en su íntima relación con otros pueblos.

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